THE SCHOOL-ARTS MAGAZINE

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The Editorial Point of View

AN OLD-WORLD MASTERPIECE

MEDIEVAL city was a rosette. Its form was sharply outlined by solid walls. Its irregular petals, masses of close-built houses, were defined by streets from the city gates converging upon the market-place. Its center was accented by the cathedral, high, rich, impressive, dominating the whole. The life of the city came and went like the blood in a living body, to the heart and from the heart, and that heart was the cathedral. To its font every child born within the city was brought for baptism. From its altar young men and maidens went forth consecrated for every high adventure. On market days and feast days the populace poured into the square and its cathedral. From that cathedral and that square, upon occasion, they went forth to fight for prince and town. What wonder that in the course of time the cathedral gathered to itself a wealth of love and treasure! There the successful merchant placed his thank offering; there the bereaved left a memorial; there the rich displayed his devotion, and the victor his banners; and there was inscribed for the dead a sculptured record of his deeds. The cathedral itself a jewel-box beyond price - became the city's jewel-box, a treasury of memories immortalized in chiseled stone and polished marble, gilded bronze and colored glass, in pictured wall and jeweled shrine, in embroidered robe and emblazoned shield. It became more than that. It became the reading-book, the history, the biography, and the prayer-book of the people. It developed in them a civic consciousness, a civic pride, a civic ambition — qualities of strength to be found even yet in those old cities that we visit for a summer's holiday.

A NEW-WORLD POSSIBILITY

Our cities are not rosettes! They are too often but monstrous, irregular blots upon the landscape. An eccentric spatter, a miserable street of disreputable structures shooting out on this side, ends in the blob of some filthy factory district; another spatter, a rough car line, on that side, ends in another black blob, a grimy freight junction suburb. Within the blots and blobs streets run stupidly at right angles to each other. There is no civic center, no dominating feature, no unity.

No; but there are local accents, and these accents are the schoolhouses. Travel and observe. From the car window you can see, rising above the

POINT OF VIEW

roofs of the dwelling-houses in every city and town and hamlet in this broad country, the big roof of a schoolhouse. The dwellings may be of wood, but the schoolhouse is likely to be of brick. They may be as ugly as only American houses can be, but the schoolhouse has architectural distinction. It is well placed in its lot and well cared for. It is, all things considered, the best building in that locality. And why not? It is "the mother of us all," intellectually. It stands for the one article of faith upon which we all agree. It is the most thoroughly christianized and democratized institution we have — the one place where race and creed, wealth and social position do not count. The schools belong to all the people all the time. The schoolhouse, with its large school hall and its numerous related rooms, is fast becoming recognized as the logical center of the local civic life. It seems destined to bear ultimately the same relation to that life that the church used to bear to it - to become the center of its devotion, the source of its culture and the memorial of its achievement. some localities the school building has already begun to gather to itself the trophies of victorious children and the gifts of grateful men and women. Let the good work go on. The churches will not suffer. Real religion does not require State aid! Religious devotion will always make churches beautiful and impressive. Civic devotion should make schoolhouses beautiful and impressive also.

WHAT AILS ALUMNI ASSOCIATIONS?

In this exaltation of the public school building alumni associations will find their chief excuse for being. The trouble with them just now is that they do too little and eat too much at one time. Instead of putting three dollars per head into their own stomachs once a year they would better see that school yards are beautiful; that schoolroom walls are tinted and hung with works of art; that school libraries are rich in reference books; that school museums are stocked with useful exhibits; and that school halls are transformed into Halls of Fame.

Let us learn wisdom from one of those medieval cities where civic spirit still throbs and achieves — the city of Dresden.

THE DRESDEN CONGRESS AGAIN

On Wednesday evening, August 14, the official delegates to the Congress were entertained by the city of Dresden. The city's palace was a blaze of light: in its great central hall and the adjoining corridors the city's guests were served at sumptuous tables. thing was of the finest-Dresden china. the silver bearing the arms of the city, a banquet prepared by the chef of the city in the city's own kitchen, and faultlessly served. The Mayor, the President of the High Council, and the Chief Marshal of the city, who in full uniform had received earlier in the evening, sat at the head table with high foreign officials at left and right. Here, as at the Exhibition, the Editor determined to look for the unusual. He had eaten delicious food before, but never in such a hall. Golden pillars supported the upper walls. These walls were adorned with masterly paintings of the most famous buildings and views in the city.

The ceiling was coffered and filled with handsome panels of pierced metal, affording perfect ventilation. From the carved beams hung clusters of electric lights in splendid settings of frosted gold. In the center of one side of this room was the daïs for the Mayor of the city. Upon it stood his great chair of carved oak; around it ran a balustrade decorated with the shields and bearings of the guilds of the city, cut in relief and overlaid with gold and color. - the arms of the blacksmiths, the potters, the bakers, the wool merchants, the weavers, the dvers, the tailors, the bootmakers, the chimney-sweeps, etc. thirty-two ancient and honorable guilds in all. The tables were ornamented with cut flowers in vases of rare design and workmanship, presented to the city by these guilds. Upon the head table gleamed a lustrous tree of frosted silver, four feet high. Its branches of exquisite grace of line, bearing here and there acanthus leaves of perfect form, terminated in flowers of silver and opalescent glass. Some of the flowers were closed, like great magnolia buds; others had bloomed, revealing golden hearts a loving cup set with gems, a little victory with a starry crown, or some other device, quaint and beautiful, again the symbol of a guild. The tree was hung with jeweled trophies — medals of honor, prizes, decorations - received by members of the guilds during the past year. If a guild's members had received honors, the guild's flower was in bloom; if not, its silver sepals were closed. Upon one wall of the room were tablets containing the names, cut in metal, of the people whom the city had delighted to honor. The list was a long

one, running back through the centuries. In a word, this hall reflected the taste, the achievement, and the loyalty of the first citizens of Dresden. It was to every visitor a magnificent, never-to-beforgotten object lesson. To every citizen of the city it must be a perpetual inspiration.

THE ALUMNI ASSOCIATION'S OPPORTUNITY.

What Dresden's City Hall has become to that city, the schoolhouse may become to its school district, if the alumni association can be brought to realize its power. Let the gifts of freshly graduated classes be supplemented by the gifts of successful business men, graduates of long ago; let fitting memorials be installed in honor of the alumni who have helped in improving the community, who have been conspicuous in public service, who have achieved distinction in the arts; let the school but have the place it deserves in the thought of all its graduates, and the school building will become, in course of time, the cathedral of the civic life.

A WISE ALUMNI ASSOCIATION

The School of Industrial Art of the Pennsylvania Museum has an alumni association that does not just eat. As one member puts it, "We spend our substance on other more important as well as more digestible matters." This association has established a loan fund, from which sums are advanced for an indefinite period, without interest, to pupils of the school who need assistance. It has established scholarships — six for courses leading to the diploma of the







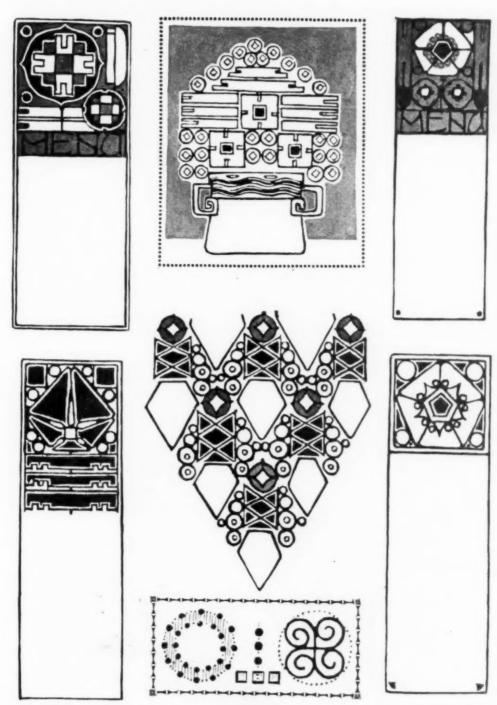




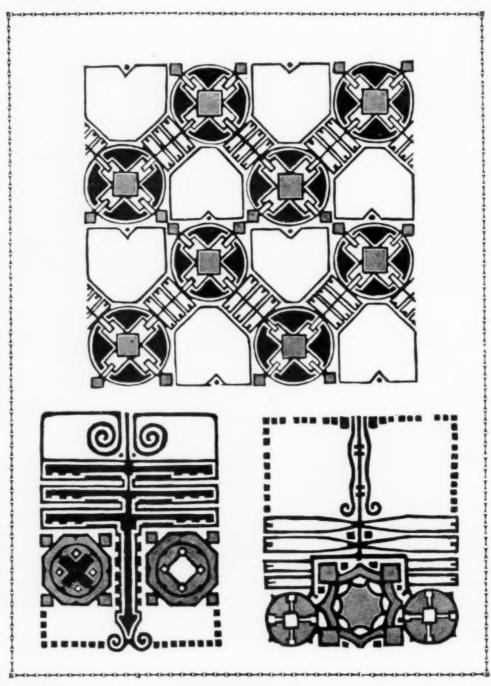
A Rhodian flask, a Spanish Moresque vase in gold luster, and an Italian drug jar, from the John T. Morris collection; a China jar with Persian motives and another with Byzantine motives, from the Mrs. James Mifflin collection; given to enrich the School of Industrial Art of the Pennsylvania Museum, Philadelphia.

school, and two for the special study in Italy of some form of industrial art. It has established a costume sketch class

from the living mode, sufficiently endowed to provide for the care of the large collection of costumes donated for



The bold originality of the decorative design from the schools of Austria-Hungary shown in the work exhibited at the Dresden Congress is here exemplified.



These designs for menus, bookmarks, embroidered school bags, etc., were first reproduced in Nas-Smer, "The School Arts Magazine" of the Hungarians.

the use of the class, to add constantly to that collection, and to furnish free instruction to all members. It has a reception committee to meet and welcome all new students on entering the school, to assist them in finding pleasant accommodations, and to acquaint them with the activities of the school. It encourages gifts to the school to make the building and its contents as stimulating and as rich as possible, educationally. Here, for example, are two china jars recently added to the school's collection of pottery by Mrs. James Mifflin, and three historic pieces from the John T. Morris collection. Here also is a report from the last annual meeting of the Association:

The annual meeting of the Alumni Association of the School of Industrial Art of the Pennsylvania Museum, Phila-delphia, was marked this year by an exhibition of the work of Miss Sophie Bertha Steel, one of the members, who has the happy privilege of traveling to all parts of the world and re-turning with sketches of the scenes she encounters. At the turning with sketches of the scenes she encounters. At the last meeting her Egyptian subjects were shown; the year before subjects from Algiers and Biskia; this season subjects from India, Java, China, and Japan, with bits of Manchuria and other equally unspoiled regions. Accompanying these were several hundred photographs of features of the Durbar (where Miss Steel had unusual advantages), of native types on the sislands and inland cities of the other countries visited—selections of great value to the illustrator.

An original "decorative" dance of Italian Gypsies, with poses replete with interesting suggestions for the students of composition, designed by Mr. Abbott McClure, was given by student members.

student members.

Another foreign scholarship, for the study of industrial art another foreign scholarship, for the study of industrial arti-in Italy, was presented by Mr. Charles Burnham Squier of New York. This makes the third available for the coming summer. The awards will be made at the Commencement exercises of the school, and the holders will sail early in June to begin their work.

One of the hospitable offices of the Association is to give

One of the hospitable omes of the Association is to give a reception and entertainment to all the new pupils entered for the season. This year the musical numbers and the "character" dances were all performed by the characters themselves, which gave the personal element often lacking in functions where outside "talent" is engaged.

With an alumni association such as all this implies to back Mr. Leslie W. Miller, the efficient principal, what wonder that the school flourishes and

becomes stronger and more fruitful every year! Alumni associations of similar spirit would increase the educational efficiency of a school anywhere.

HUNGARIAN DESIGN

THE Hungarian section of the exhibition at Dresden last summer was, like



An example of decorative paper-cutting such as that shown in the Austria-Hungary exhibit, first reproduced in Nas-Smer.

the Hungarian music, free, brilliant, charged with feeling, fascinating. To the cultivated and temperate (some would say conventional and timid) spirit of those who have been raised on the classics, "the incontestably good," the art of the Hungarians has a dash of the barbaric. But almost everybody likes it, although many do not care to confess the fact. It is the old story of the teetotaler and the frozen pudding. Such work as the Hungarians are doing should rouse us not to imitation, but to emulation: not to be like them, but to insist on being ourselves, frankly and with all our might, but ourselves at our best.

The Pupil's View of Drawing

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SIGNIFICANT STATEMENTS BY BOYS AND GIRLS IN A LARGE CITY HIGH SCHOOL

By Morris Greenberg

Commercial High School, Brooklyn, N. Y.

IN schools where drawing is taught by special teachers, and where it is not coördinated with the other subjects in the curriculum, it often happens that some teacher of the other branches of study will express doubt as to whether drawing and design are of any advantage or benefit to the pupil. Such instructors take a characteristic but illogical attitude that since they, college and university graduates, have been successful without having received training with the pencil and brush, therefore the subject is not an essential one. Again and again has the writer heard the question put by his colleagues, "Of what use is drawing to these boys?" That some of the public (a number growing smaller every year) should still consider the study as a fad might be expected, but that teachers should express the same doubt seems surprising. Of course any one who teaches or supervises drawing could show these doubters that there are developmental and æsthetic as well as practical reasons for teaching the subject. Twenty sound reasons were given in the September (1910) issue of the School Arts Magazine; but such testimony may be supplemented by the pupils themselves in their own way. Not long ago this was done in our school, and convincingly too. It came about in this way. At a State examination in drawing given to high school pupils who

wished to receive credits for graduation, the following question was asked: Has drawing, including mechanical drawing and design, ever been of direct value to you? If so, in what way? If not, how might it be made valuable to you?

The age of the boys who answered the question averaged sixteen years. They had studied free-hand drawing and design during the first, and mechanical drawing during the second, year of the course. What makes the answers all the more instructive and valuable is the fact that no question of a similar character had ever been proposed at previous examinations. Had not this been the case, the pupils might have been prepared for the question during the review preceding the test. As it was, the answers were spontaneous and show the pupils' real attitude. The reasons advanced are not so well stated as they would have been had they been given in a composition exercise after analysis and discussion of the different topics.

The extracts from answers given below were copied without corrections from the pupils' papers. They are therefore of unusual interest. Each paragraph presents the thought of one pupil. Here, then, is the testimony of ten:

A designer demands a large salary, and I have had the fundamentals of designing and have a chance for a larger salary. Drawing has been of direct value to me. I have designed and printed show cards for store windows for business men in our neighborhood. I have thus earned enough money to pay car fare and other necessities.

Designing has helped me make attractive trade marks.

It is very useful to advertising. A neat border and well-spaced page appeal to the reader.

Last summer I was able to make a poster for a fair held in our church.

During the summer months and after school I worked in a real estate office where I often had to print various announcements on large slates to be set in the window, and I often had to handle plans of houses where my knowledge of mechanical drawing helped me.

I have been enabled to decorate my album in which I keep photographs.

Being interested in electricity, I have been able through my knowledge of drawing to read plans for many pieces of electrical apparatus and also construct them.

Mechanical drawing is very handy because in many cases the American boy can make working drawings of things he wishes to do or have done for him.

If one is a good draughtsman, he can make a living by drawing for papers, as "Tad" does for the "Journal" and Robert Edgren for the "World."

Some of these answers may perhaps be disappointing to the champions of drawing. Shall we teach art with the aim of enabling a boy to earn his car fare? Are these boys taught to become sign painters? Neither; the answers were probably given because of the words "direct value" in the question. Many of the statements in other examinations showed the same practical turn of mind, the results of ideas inculcated by the teachers in every department of the school. There is another explanation. The design course is adapted to

the needs of the pupil, and consists mostly of problems which combine lettering with conventionalized forms. The student is therefore always on the qui vive to turn his knowledge into "car fares and other necessities." The last answer is characteristic of the dreams of the average budding cartoonist.

A few told of the help which the study gave them in other school subjects. The three below are characteristic:

I have used it to illustrate compositions.

It is valuable to me in school, as we have often to draw maps which require a power to copy and a knowledge of proportion, and also to print a name of the map and its different parts. It is also useful to me in physics.

I take more interest in nature study work because of the subject (free-hand drawing).

The following answers by the pupils show that the teaching of commercial design also includes ideas of personal and home decoration. This is perhaps the most important phase of the subject. Some of the ideas are crudely expressed, but it must be remembered that they were written in the stress of an examination.

It is of much good for a man to develop taste. It shows in his home.

One who has not a little knowledge of designing seldom has a homelike room or office.

It has taught me what kind of a picture to buy.

I am able to beautify my house by selecting the best designs for the walls, ceilings, and furniture.

When my mother went to buy a carpet, she selected one with a design which consisted of flowers only, such as branches of roses. I told her these roses on the carpet reminded one of real roses, and that she would not want any one

to step on real roses, nor would she wish to have real flowers lying on the floor.

If one buys an expensive suit and wears a hat and necktie which do not harmonize with it, his appearance will be spoiled.

The colors and designs upon my shirts, ties, and suits are chosen with an eye toward good design.

I am able to tell which colors harmonize; design has taught me to despise dresses which were loud in color

Design has taught me to arrange the plants in my garden in a more pleasing way.

The educational value of drawing, so vital in the school life of the pupil for the development of important mental faculties, is well set forth by the boys in the answers that follow:

Sometimes I wish to tell a friend about something I saw or something I know of, for example, a flower the name of which I do not know. I draw it in the best way I can, and many times this helps me to tell him something which I cannot express in language.

Mechanical drawing has taught me to be accurate and careful. It has also taught me to think steadily.

Since I have been taught drawing, I have learned to look at the object before me with greater care, and to notice the shape, design, grace, curvature, etc. I have also learned to take in at a glance the relative sizes of objects and other details.

It has trained my power of observation to such an extent that I not only observe objects such as flowers, animals, etc., but study their structure and parts.

It has trained me to be neat and accurate.

Mechanical drawing has enabled me to look at an object in many different ways. It has also taught me that when you do a thing you must do it accurately, and not half way, or nearly accurate.

Lastly were given answers which tell of the development of the power of criticism, and of the greater meaning which objects have for the pupil:

It helps me to see the beauty of things.

It has taught me to see beauty in objects, paintings, etc., that before my course I saw no beauty in.

The ability to sketch objects around you is often a source of real pleasure.

In the first place it has helped me to appreciate a good piece of art. Secondly, it has developed in me a sense of criticism.

I appreciate more a good design after having received instruction in the subject. Magazines and newspapers are full of beautiful designs, and it gives me pleasure to look at them and think how they might be improved.

Not that it has made an artist of me, but because I have learned to appreciate a good drawing or picture when I see it. When I see a good drawing I am immediately attracted to look at it, and comment on the different parts of it.

It has taught me how to love scenery more than I did before I took up the study of free-hand drawing.

These statements, written spontaneously in answer to a question not previously given to the pupils, furnish some of the best reasons for the teaching of drawing and design. They also suggest lines of instruction along which greatest interest and power can be developed.

FOR A MECHANIC DRAWING BECOMES THE AVENUE OUT OF HIMSELF INTO THE UNIVERSE

- Milton P. Higgins

Mardi Gras Poses

HOW DRAWING FROM CHILDREN POSED IN COSTUME CHANGED THE ATTITUDE OF A CITY-FULL OF BOYS AND GIRLS

By Mary B. Grubb

Supervisor of Drawing, Baton Rouge, Louisiana

THE winter had been so unusually warm the last days of February found our Cherokee hedges starred with a few snowy blossoms; the swamps and

against a background of roses. We were to have a water-color lesson in a sixth grade. Each pupil brought and arranged the vines or flowers he espe-







Plate I. Three of the Mardi Gras Indians. Pose drawings under the direction of Miss Grubb.

woods a gorgeous mosaic of yellow jessamine, azalea, wild honeysuckle, the trumpet vine, and myriads of other paintable flowers; our quaint, old Southern gardens a riot of color with the petunia, wistaria, and amaryllis

cially wished to paint. The selections were unusually satisfactory—things that contained good lines of growth and naturally suggested excellent compositions. These children had in the autumn displayed some skill with the

brush, and a fair appreciation for arrangement. They worked diligently now throughout the entire period. After the lesson the results were collected and studied. Principal, teacher, and supervisor agreed that they were a total fail-

already our shop windows were gay with masks and costumes. Then I knew why the children had failed. How could the hand of the boy or girl paint the most beautiful of flowers, when before his vision floated a mental procession of



Plate II. Children are much more likely to do good work from models posed in costume, as shown by these drawings by grammar grade children.

ure. What was the trouble? Why with such beautiful material had our work been unsatisfactory?

When going home my eye caught a Mardi Gras poster, "The Proclamation of Rex," announcing an early date for his visit to the city. Although eighty miles away, the Carnival spirit had traveled with marvelous speed, and

gay masqueraders — and the choice to be made between the fascinating costumes of Indian, cowboy, soldier, jester, or between the gay Spanish dancer, the quaint Colonial girl, and the demure Puritan maiden?

We would try Mardi Gras poses. In the lower grade we used charcoal, soft crayons, water-colors — all loose, somewhat indefinite mediums. This year, beginning with the sixth grade, we were trying to use the pencil more frequently, and to have our good work the result of study and definite thought rather than of accident or chance. After some hesitation I decided upon the pencil as the medium for our Mardi Gras poses.

When time came for our next lesson

they wanted to add the features. While only one child secured a resemblance to the model, yet the features were fairly well placed and only a few were in the least grotesque. Plate I shows a few of the best results of this and a succeeding lesson from the same subject. Some pupils took this second lesson to perfect their original pencil drawings, some



Plate III. A most encouraging result of enjoyable pose drawing is the home work, of which these sketches of "little brother" by an eleventh grade pupil are fair samples.

in a sixth grade, we had for a model one of the boys in an Indian costume. Where the pupils were dissatisfied with the view from their own desks they took their geographies, rested them on the windows, stools, or any other convenient place, and stood as they worked. First each one decided upon and located the height of the figure, studied the action, its chief divisions, and the principal points with reference to a vertical line. Usually in this grade we block in the face and omit the features, but this time the children were so intensely interested

added color to their sketches, and some made entirely new pencil pictures. The only thing demanded was that each pupil should work every minute.

In selecting a new subject we found that two of the girls had similar quaint flowered gowns with plain pink petticoats. They posed for us on opposite sides of the room. This gave all an opportunity to get a profile or full-face view (no one wanted to draw the pose showing the back). This time we worked more uniformly. One lesson was given to the making of a very light pencil

drawing; the next period to the revision of the sketch and the adding of a wash of dainty color. Plate II shows one of these figures.

A seventh grade made equally successful sketches of a boy with a mask (see Plate II). A few of the high school pupils, who are especially interested in life work, tried, for extra problems, decorative arrangement of the figure for Carnival posters, and for the cover of a portfolio of Mardi Gras poses from the grades.

Mardi Gras passed; the Lenten season followed; Easter came and went; but a spirit of joy remained. Pose lessons are

now anticipated with delight rather than with dread. Everywhere below the high school, when we have pose lessons, they are made from a model in fancy dress. A Japanese girl or a boy scout comes in to make us forget the monotony of long school days and the tiresomeness of the commonplace.

The most encouraging result of the Mardi Gras drawings is the number of delightful home sketches that are now brought in. Interesting suggestions of home life with father, mother, baby, nurse, or cook, as models—"Our Brother" is the work of an eleventh grade pupil.



Decorative design from Austria-Hungary, first reproduced in Nas-Smer.

Hand Printing in the Schoolroom

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By Pedro J. Lemos

Instructor of Decorative Design, San Francisco Institute of Art

Note. —Of the large number of art teachers and supervisors that it has been my fortune to instruct in summer-school and regular work, I have found but few who have been successful with prints made from wood blocks.

To overcome the difficulties I have developed the simple process described herewith. I am using this process with the best of success in my own work.

WITH the introduction of design into the schoolroom, the application of the problems to booklet construction is an interesting and important feature. The possibilities and limitations of the various processes of making prints can be thus shown the students, and a practical and profitable vocation developed.

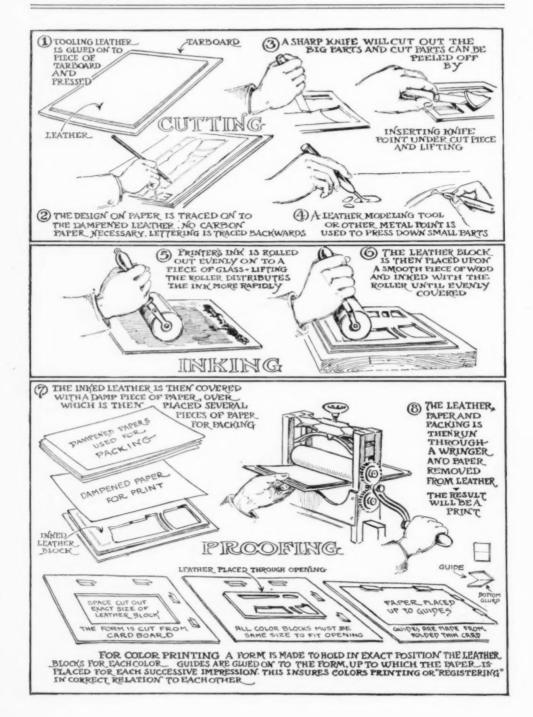
All processes of making prints are based on three methods — the relief, the intaglio, and the planographic. The relief is such method as the wood engraving or the modern process of photo-engraving, where the image to be printed is in relief, and transfers the ink from the relief image onto the paper by contact.

The intaglio is where the line is cut or incised into the plate to hold the ink, which, when the paper is pressed onto and into the lines, transfers the image onto the paper. Such methods as etchings, copper and steel engravings are done by the intaglio process.

The planographic method is the lithographic process, where the lines are practically on the surface of the stone; so there is a ridge, a furrow, or a fatty streak to hold the ink.

Of the first process or relief work it is interesting to note the interest revived in wood engraving. Though an old method, artists of note are to-day engraving their own conceptions directly on the block, just as they produce etchings. Color work is produced by separate blocks, or the colors are painted on the block in their varying tones, such as is done in producing Japanese prints. Block printing in the schoolroom presents several difficulties for the following reasons: it requires considerable skill to cut the block so as to leave the design proper for printing. Again the wood may splinter, due to the grain, and the entire block be ruined at the last minute. If the block be successfully cut, it is almost impossible to produce a good print without a printing-press. These and other reasons have prevented a more general use of wood block for prints in the schoolroom.

Linoleum, rubber, composites, and even potatoes have been used successively for producing small motifs, but for large blocks, and where any certainty of detail is desired, such material is not practical. To produce a block that would embody the principles of relief printing and successfully produce a print, I have developed the leather block for use in the art and public schoolroom. The advantage of using leather is the rapidity with which the block is produced, and the small ex-



pense attached to the producing of the prints.

The preparation of the leather is as follows: A piece of leather such as is used for modeling on, and generally known as "tooling calf," is glued to a piece of tarboard or other heavy card. It is presumed that the teacher knows that shank and neck portions of a skin of tooling calf do not model well, and selection for block must be from good parts. The design on paper is traced upon the leather after the leather has been sponged to make it sensitive to the tracing. Where a book plate or other design is used containing lettering, it is best to make it on tracing paper so that it can be reversed in the tracing. This is necessary, as lettering on the printing block must be backward in order to read right on the print.

Cutting. A sharp knife is used to cut out big parts. Cutting sharply into the corners will permit the cut parts to be easily peeled off. Large parts will necessitate the tarboard being cut away as well which, as the tarboard is made in plies, can be peeled away in strata. The bigger the open part the deeper should be the cutting, even to cutting through the tarboard. This prevents the ink roller from touching bottom and ink from being printed where it is not wanted.

A leather modeling tool or any metal point, such as nutpicks or nails, can be used for pressing down the small parts and producing lines. The leather, when slightly wet, can be modeled down deep enough to produce white spots and narrow lines of desired shape and direction on the print, without any cutting. This eliminates the greatest difficulty of

wood-block cutting, the cutting of small parts.

Inking. If the motif or design is small, it can be printed by hand. This is done by mounting it on a block of handy size, and it can be used like a rubber stamp. Writing ink or water color on a pad can be used for inking. If oil paint is used, it can be put on with a brush in the usual way used for block prints. A dabber made from a piece of shingle covered with cotton and taffeta can be used for patting on the paint or printer's ink.

In inking larger surfaces a small ink roller, palette knife, several pieces of glass, and printer's ink are necessary. Black and brown ink will permit several variations when mixed. For color work, yellow, red, and blue transparent inks should be used. To produce tints, lakatine, a composition also known under other names, is used. When lakatine is mixed with inks, it reduces them to tints in appearance like water color.

Inks may be purchased in tubes; this is convenient and economical, as it prevents waste. The desired color is produced by mixing the inks with a palette knife on a piece of glass. When desired color is secured, it is rolled out onto the glass until roller is evenly covered with ink, which in turn is transferred to the leather block which has been laid upon a smooth piece of wood.

Cold weather makes the ink stiff, and difficult to roll. A few drops of turpentine or lavender oil, or rolling the ink on a warm piece of metal, will make the ink roll smoothly.

After prints are made, benzine or gasoline can be used for cleaning roller,



glass, and leather block. Safety cans such as are used by printers may be secured for holding the benzine. Inks and roller can be purchased at any printer's supply house.

Proofing. Any drawing or soft paper may be used for printing on. To prepare the paper, one half of it should be soaked in water in single sheets; the dry half of the paper used should be sandwiched between the wet sheets as they are removed from the water, and the entire sheets pressed for three or four hours, after which the paper will be found to be all of equal moistness.

A sheet is then placed on the inked leather, more damp sheets placed over this, for packing, and the entire layer run through an ordinary clothes-wringer. The packing is removed, the paper is carefully peeled off the leather, and the print appears.

After the first proof it may be found that large parts that have been tooled down will have to be cut out as they print. However I find that this printing of larger tooled parts often produces pleasant effects, offsetting otherwise harsh lines. Again it may be found that, due to uneven contact, parts of the print are too light. This is a matter which all printers have to contend with in the best of printing plates, and is corrected by cutting a patch of the light portion of the proof and pasting it in the correct position on the under side of the block. This is termed "underlaying." "Overlaying" is putting the patch between the packing and the paper receiving the print.

Color Prints. Careful tracings from an outline drawing of the design to be produced are made on as many blocks as there are to be colors. These blocks must be of exactly the same dimensions. A form is made as per diagram to receive the paper in the same position in each succeeding impression. Where a color on any of the blocks does not extend to the edges, a small corner piece of the leather is retained at top and bottom as a guide to fitting the block into the form. The ink is removed from these corner marks before printing, if no succeeding impression will conceal it. Colors can be planned so as to lap over each other, producing additional colors.

The blocks will give a great number of impressions, and two or three trials of the method will solve all questions that may arise.

The possibilities of producing designs for booklets, postcards, book plates, posters, etc., and engraving and printing in the schoolroom are made practical and feasible by this method.

Students will enjoy the problem, and many opportunities for creative and inventive ingenuity will arise. Besides, it will create a deeper appreciation for the printed page and the allied industries that go to make up the Book Beautiful.



ALICE. By WILLIAM M. CHASE

Many people are under the impression that this is Mr. Chase's daughter, but he has said that she is simply a little girl that lived near him, whom he saw skipping one day.



A Girl that Everybody Likes

A STUDY OF "ALICE," WITH A GLANCE AT WILLIAM M. CHASE AND HIS WORK

By Elsie May Smith

MONG living American artists who have achieved an enviable success must be mentioned the name of William Merritt Chase. Distinctly American in his ideals and tastes, with profound confidence in the future of American art and intensely patriotic, he has deserved well of his countrymen. When a young man, he refused a flattering offer of a professorship in Munich that he might cast in his lot with his own people, and throughout his career he has been extremely loyal to America. As an artist, he has been popular both with the public and with professionals of his own class. The public has been delighted with his choice of subjects, while the artists have found much to admire in his treatment. — style of handling, drawing, and color. His work is fresh, vital, and captivating. It holds the attention, fascinating the eye so that one has a feeling of immediate pleasure in contemplating it.

"Alice" is a capital example of his style of work. Entering a gallery where Alice hangs, one's attention is drawn to it at once. That happy, smiling face and the buoyant attitude command attention. The flying ribbon, so graceful and so suggestive of motion, adds its own peculiar charm, and we wonder who this gracious maiden may be. No one could fail to detect the sense of tripping, graceful movement that the

figure conveys. We feel that those feet could very easily break into dancing and that the waving ribbon would then be a very pretty sight. How it seems to flutter in the air even now! Its graceful curves are very beautiful, and we are glad that Alice is holding it. Note the beauty of the carriage, the fine pose of the head, thrown slightly back, and the way in which the hands grasp the ribbon. Alice has a striking face, with its high, broad forehead, large, soft eyes, and pretty teeth. All her features are finely shaped, and her smile is very pleasing. It assures us that she is enjoying herself and entering into the spirit of her playful sport. We know that she is a light-hearted, happy girl.

Notice how accurately the artist has represented the folds of her dress. The soft, white fabric is very well painted, as are also her shoes and other details of the picture. But these are, in fact, only matters of detail. The striking, important thing is Alice herself and her captivating pose. We all feel that we should like to meet her. Her sweetness and grace tell us that she would be well worth knowing.

SUGGESTED QUESTIONS FOR STUDY

What kind of a person does "Alice" represent? Is she young or old? What has she in her hands?

What do you think she is doing with the ribbon?

¹ Small reproductions of this picture can be obtained from the Art Institute, Chicago. The original painting is in the Art Institute, Chicago. It is on canvas 68½ × 49½ in. The reproductions cost five cents for two.

Does she look as if she has been dancing? Why?

Does the picture give us a sense of movement? Why?

Do you think the ribbon adds much to the attractiveness of the picture? Why?

Does it give the picture graceful lines?

Has Alice a graceful carriage? What is the position of her head? Of her feet?

What is the expression of her face? Does she seem happy?

What shows us that she is happy? Is she pretty?

Does she seem to enjoy her sport? Would you like to know Alice? What makes you think that you would like her?

Do you think this is an attractive picture? Why do you like it? What feature would you say was most responsible for its charm? Why?

BRIEF SKETCH OF THE ARTIST'S LIFE

William Merritt Chase was born in the little town of Franklin, Indiana, November 1, 1849. He tells us that the desire to draw was born in him, and that his mother long treasured some of his school-books whose illustrations he had colored as a boy. His father, a well-to-do shoe dealer in the neighboring city of Indianapolis, was anxious that he should succeed him in the business. He took the boy into his office for a time, but William proved very unhappy and discontented. Above everything he wished to take lessons in drawing, and at length his father consented, although he regarded it as a sheer waste of time. Speaking of his father, William says: "He wanted to make a business man of me. But later, when I had made some reputation, he became immensely proud and claimed some share in my artistic impulse. He bethought himself that as a boy he had been fond of making little figures out of the mud kicked up from the creek's bottom. asked me privately if I could take one of my younger brothers in hand and make an artist out of him."

When nineteen years old William began to study under Benjamin F. Hayes, a portrait painter of some note in Indianapolis. He made such splendid progress that his father, the following year, permitted him to go to New York, where he studied, first under J. O. Eaton and later at the National Academy of Design, where his painstaking accuracy and close application soon attracted attention.

Meanwhile his parents had moved to St. Louis, and to this city he accordingly went after leaving the Academy. 1871 we find him opening a studio here as a portrait painter, but finding it more profitable to paint flower and fruit pieces, which he represented with careful attention to the most minute details and easily sold. In this way he earned enough money to go abroad. As an evidence of the vagaries of unintelligent public opinion, it may be said that years later, when his mature work was exhibited in St. Louis, many considered it not nearly so good as the fruit and flower pieces of other days and felt that "Europe had spoiled young Chase."

Arrived in Europe, Chase went to Munich, where he entered the Royal Academy under Alexander Wagner. Later he studied for some time under Karl von Piloty. From the Academy he gained three medals, while Piloty was so pleased with his work that he had him paint portraits of his five children. The resulting picture is considered one of Chase's more important works. In all, six years were spent in study at Munich, beginning with 1872. The young artist also spent a year in Venice,

when especial attention was given to the works of Tintoretto. Velasquez he greatly admired among all the European masters. One of his early original pictures. "A Venetian Fish Market," was the result of this Southern visit. "The Dowager" he painted the following year. He won a medal at the Philadelphia Centennial with a picture sent from abroad. "The Dowager" he had exhibited at the National Academy in New York in 1875. Two years later he exhibited his "Broken Jug" and "The Unexpected Intrusion." As a result of his successes, he was offered a professorship in the Royal Academy at Munich, as well as charge of the first painting class in the Art Students' League in New York. The opportunity in Munich was alluring, but he decided to stand by his native land. He speaks of his choice in these simple words: "I was young; American art ,was young; I had faith in it."

Accordingly, in 1878 we find him back in the United States, taking up his new work with enthusiasm. He was destined to become a great force in American schools of art. After some years he established a school of his own, and for ten years was president of the Society of American Artists. He also

became a member of the National Academy of Design. As an artist he works in all mediums,—oil, water color, pastel, and etching,—painting land-scape and still-life with much distinction. He is perhaps best known by his portraits, some of the most important men and women of his time being numbered among his sitters, which include the painters Whistler and Duveneck, General Webb and Peter Cooper, as well as Rutherford B. Hayes, William M. Evarts, Joseph H. Choate, and Seth Low.

Mr. Chase has won many honors, both at home and abroad. Among his important canvases are "Ready for the Ride," now owned by the Union League Club of New York, "The Apprentice," "Court Jester or Keving Up," shown at the Centennial at Philadelphia, "The Wounded Poacher," "Study of a Head," "Boy Feeding a Cockatoo," "Interior of St. Mark's, Venice," "Interior of Artist's Studio," "The Coquette," and "Lady in Black," at the Metropolitan Museum in New York. "Alice" is in the Art Institute of Chicago. Mr. Chase won a medal at the Paris Exposition of 1900 with his "Lady in the White Shawl," which is now owned by the Pennsylvania Academy.

THE MAIN QUESTION IS NOT HOW MANY PICTURES CAN BE BROUGHT WITHIN THE CHILD'S RANGE OF VISION, BUT ON HOW MANY CAN HIS IMAGINATION BE AWAKENED TO LAY HOLD.

- Walter Sargent.



Some Minneapolis Rooms

AND A WORD FROM MISS ROBERTS AS TO THE IMPORTANCE OF LABELS ON WORKS OF ART

IN the old days "There dwelt a Miller, hale and bold, beside the river Dee." In our time that miller dwells beside the Mississippi, and his name is Minneapolis. The miller of the Dee produced about two barrels of flour a day. Minneapolis produces 85,000 barrels every twenty-four hours. He is the greatest

these photographic plates, — fine furniture, books, pictures, casts, cabinets of specimens, vases of flowers, pianos, victrolas, — a child is fortunate who belongs to Minneapolis. The schools of the city are considered among the best in the world. How orderly the rooms appear! Notice the work on the



A corner of a typical room in the Garfield School, Minneapolis.

miller that ever was. But he does other things besides grind wheat. He educates his numerous children. There are 41,000 of them! They are gathered into seventy-five school buildings and given the best of everything. Look at blackboards. The photographer entered these rooms unannounced. He photographed them just as he found them. They were not fixed up for the occasion. Such rooms are a perpetual education in the direction of good house-



 Λ second grade room in the Emerson School, Minneapolis.



A seventh and eighth grade room.



Lower hall of the Douglas School, Minneapolis.

keeping. But that is not all. They make for well-informed, cultivated citizenship.

The Minneapolis teachers are always studying the great problem called "Efficiency." They want the splendid school equipment of the city to yield as fine and as abundant a product as the mills of the city have been made to yield. Here is an account of one reform in the interest of educational efficiency by Miss M. Emma Roberts, whose success as supervisor of drawing for the

city brought her an invitation to speak at the International Congress on Art Education at Dresden. — *Editor*.

LABELS ARE IMPORTANT

A few years ago we undertook to label, with title and artist, all the pictures hanging upon the walls of our seventy-five school buildings. To our surprise we found many pictures practically unknown to principals and teachers, to say nothing about the children. This discovery forced the fact upon our



Upper hall of the Irving School, Minneapolis.

attention that we were not gaining all we should, in an educational way, from the pictures hung on our schoolroom walls.

We went to work at once to collect the necessary data. It required many hours of research, for we needed nearly three thousand labels. First, I asked for as complete a list as possible from each school. These lists were typewritten with wide spacing and then cut into strips and sorted, in order to bring all of one subject together. We purchased small labels of gilt cardboard and had them printed by our Board printer. The labels were distributed to the buildings and tacked in the center of the lower part of the frame. This work was often done by a manual training student.

We have learned much about our pictures during these months of study. We know now which pictures have a pedigree easily traced, and which are more or less nondescript. Incidentally we have determined to buy no more pictures which are not worthy of a label and also to hang no new picture without one. The greater pleasure and profit to the children gained through the more intimate acquaintance with artists and their work, which these labels have made possible, more than repays us for all the labor they involved. I would, however, advise other schools to take up such work before three thousand labels have to be printed all at once.

M. EMMA ROBERTS,

Supercisor of Drawing.



A corner of the upper hall in the Garfield School, Minneapolis.



GOOD IDEAS FROM EVERYWHERE 1

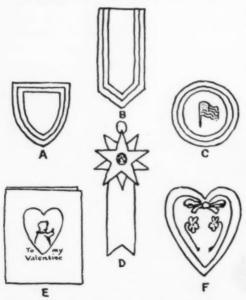
I WANT YOU TO UNDERSTAND, IT TAKES ALL THE FOLKS IN THE WORLD TO KNOW ALL THERE IS KNOWN — A CAPE COD SEA CAPTAIN

Kindergarten²

WASHINGTON BIRTHDAY BADGES. The badges A, B, and C are made of red, white, and blue papers; the largest red, the middle white, and the top piece blue.

On the blue of C paste a flag seal.

The badge D is made of a red and a white



Diagrams of objects which can be made by kindergarten children, appropriate to the month of February.

five-pointed star, the red over the white, and arranged so that the points alternate. Paste a picture of Washington in the center. The long piece is of blue.

PEEK-A-BOO VALENTINE. Fold a sheet of construction paper $6\frac{1}{2}$ x $4\frac{3}{4}$ inches on the short diameter, forming a book, E. Outline a

heart about 2 inches broad and 2 inches long on the first leaf. Make a hole in the center of the heart, so the children may insert one point of the scissors and cut the heart out.

Inside the book on the other leaf, paste a sunbonnet baby so that it may be seen through the heart-shaped opening.

In place of the sun-bonnet baby the children may stencil some simple pattern.

Write "To my Valentine" on the outside leaf under the heart opening.

VIOLET VALENTINE. White water-color paper washed with violet tint. Outline on it, with a crayon (violet shade), a rather large heart, F. Let children cut on the outline.

Outline on a sheet of white water-color paper another heart about three-quarters of an inch smaller all around than the first—let children cut. On this, using violet water color with the spot-work stroke (i. e., laying down the side of the brush, full of paint), make two or three simple violets. Tie the two hearts together at the top with a bit of violet baby ribbon. Similar valentines may be made in reds or yellows.

WORK IN SAND. MATERIALS: Have plenty of good sand.

Place as many kindergarten tables together, with long edges touching, as are needed to accommodate the children without crowding. Cover tables with enamel cloth or canvas.

Have, for each child, a zinc cutter 5 x 1 in. (tinsmith will make them at little cost). Meat skewers are helpful.

Small pine or hemlock cones, acorn cups, shells, stones, bits of ground pine, etc., are useful.

Always have a can of water at hand.

The success of the work depends very largely upon the consistency of the sand, and the probabilities are that it will need moistening several times during the lesson.

LINES OF WORK: 1. Dry sand: sifting, pouring, burying hands, etc., and some impression work.

The Editor cordially invites contributions to this Department.
 In charge of the Boston Froebel Club. Address Miss Lucy H. Maxwell, 125 Kent Street, Brookline, Mass.

2. Wet sand: modeling, cutting, impressions (borders, etc.), relief work leading to design, building.

For impression work, using cutters, make a smooth surface either of dry or damp sand. Make impressions with finger, or any object. Borders or design.

For relief work, make flat surface, fill acorn cup or shell, and turn out. If the sand sticks, rap the object with the cutter and it will come out. Borders or design. For modeling, type forms may be made either with hands or by filling hollow tins. Change to some object suggested by that form, i. e., the sphere may, by slight changes, become an apple, etc.

For modeling the house, leading toward the making of an estate or even a village, with two hands pack the (wet) sand so that it forms a triangular prism with a long sharp edge across the top forming the ridge-pole. Holding a cutter (one end in each hand) horizontally, cut the loose sand away from the front, also from the back; then in a similar way cut the sides off, leaving a pentagonal prism the shape of a house. By making simple changes this typical house may be used for a church, home, town hall, store, barn, etc.

Elaborate your village roads with trees (cones or bits of pine), etc.

In making borders and designs where flat surface of sand is used, do not let the children potter; if it is n't right it must be erased with the cutter and started again.

Let the children stand at the tables for the work.
For sand-play at the time we are talking about
the Knights pile a large mass of sand so that it forms
a high hill. On the top make a castle. Place rocks
on the side of the hill to make the castle appear
very inaccessible. Sink a small pan in the sand and
fill with water for the moat. Make small houses
at foot of the hill. Have many trees on hillsides.

SALUTE TO THE FLAG

My country's flag,
Red, white, and blue!
To which I must
Be ever true.
Guard it with care,
Ne 'er let it fall,
For it means justice
To us all.

— Martha B. Thomas.

Primary

LINCOLN SYMBOLS. These may be cut from paper of appropriate color, and mounted on cards. The open fire with a book below it, in memory

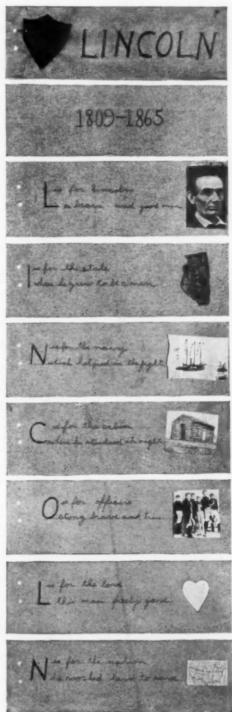


Plate II.

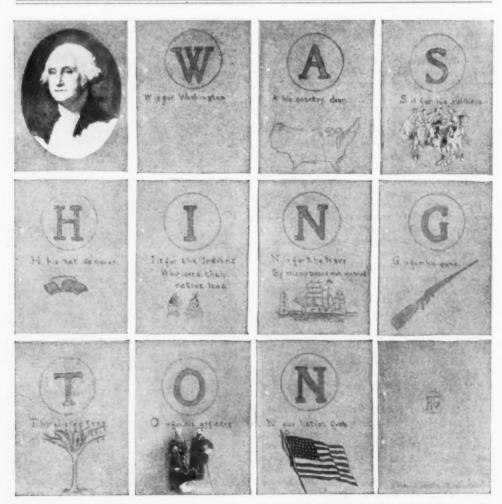


Plate III. Covers and ten pages from a George Washington booklet by Helen Gueffage, a fifth grade pupil, Pueblo, Col.

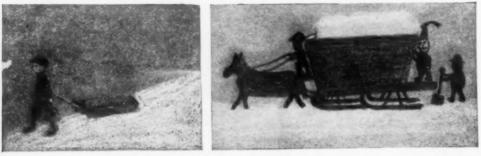
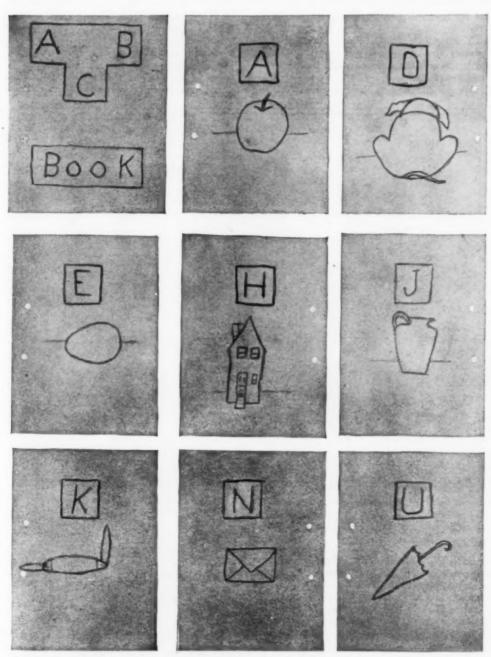


Plate IV, 1. Going home to supper. A wash drawing by Ruth Homel, IV, Martinsville, Ind. 2. Hauling snow. A crayon drawing by Walfred Rokkolo, II, Laurium, Mich.



 $\label{eq:policy} Plate~V.~~Nine~of~the~twenty-eight~pages~of~an~exceptionally~good~illustrated~booklet,~such~as~primary~children~can~be~taught~to~produce.$

of his boyhood persistence in getting an educa-

The axe lodged in a stump, a symbol of his pioneer life.

A pen with the shackles which it struck from millions of slaves.

Wreath surrounding the monogram "AL," a

of Washington is always better than a drawn portrait in elementary work. A drawn portrait by a child is sure to be little more than a caricature and is inclined to do more harm than good. The one criticism that may be made of the pages shown in the plate is that all the illustrations should have been drawn or all of them cut from

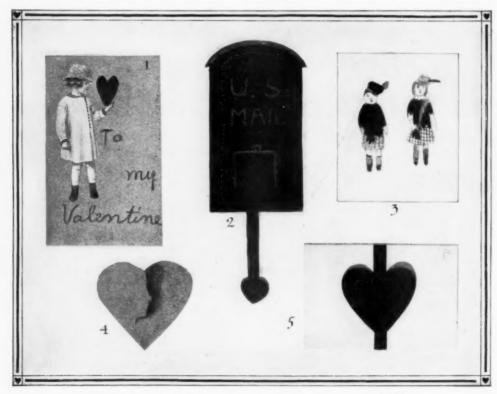


Plate VI. Examples of valentines produced by primary and grammar school children.

symbol of victory, and the palm a symbol of martyrdom.

LINCOLN BOOKLETS. These must be extremely simple in the lower grades. Among the best that came to the office last year were several from Pueblo, Col.

Plate II gives the pages of one of these combining paper-cutting with writing and lettering. This particular booklet was made by Ruth Stevens, a nine-year-old pupil, Pueblo, Col.

WASHINGTON BOOKLET. Plate III shows the covers and pages of a booklet made by Helen Geuffage, V, Pueblo, Col. Its orderly arrangement is commendable. A clipped portrait paper. The combination of the two tends to destroy the unity of the booklet.

These acrostic booklets are greatly enjoyed by children. While having a certain uniformity, they give opportunity for individual thought and expression, for each pupil may make his own selection of illustrations to fit the letters of the name.

WINTER SCENES. These are subjects for illustrative sketching universally enjoyed by the children. Two prize drawings by members of the School Arts Guild are reproduced in Plate IV. Both of them were made upon gray paper. In one, water color was used; in the other, colored crayons.

APPLIED OBJECT DRAWING. One of the best examples of this kind of work came last season from Beatrice Shimonek, only seven years of age, Laurium, Mich. The cover and eight pages of her fine little alphabet book are reproduced in Plate V. Adults often have to guess what children have attempted to draw. In this case they are assisted by the initial of the name placed above the drawing. The plan of this booklet, the arrangement of the pages, and the spacing of the title-page are thoroughly good. Here is a product within the range of primary children's

"Every laddie has his lassie, whether she be dark or fair."

Grammar

OBJECT DRAWING. That teachers may have something to guide them in model and object drawing to secure certain definite results in each grade the Editor invited Mr. Nathaniel L. Berry, formerly Supervisor of Drawing, Newton, Mass., a practiced hand in tabulating information, to make a careful study of "Fine and In-







Plate VII. Pencil drawings from objects presenting elements attractive to children, glints, reflections, refractions, and other "effects."

powers admirably carried out. The teacher who planned such a booklet is to be congratulated.

COMMENDABLE VALENTINES. Here is a vast field for individual effort. The School Arts Magazine will welcome examples of valentines such as children like to make which are at the same time "not too bad" from the æsthetic point of view. Among those which came to the office last season perhaps the best is that shown in Plate VI, as Fig. 1, "my heart in my hand," by a primary pupil, Syracuse, N. Y. This consisted of a sheet of drawing paper, a carefully cut out figure of a child from some illustrated paper, and a heart cut from colored paper. The problem was properly to group and paste these elements and to add the salutation with a red pencil.

Another good valentine in this class is shown at 3, from the Elmwood School, Buffalo, N. Y. In this case the little figures were first drawn and colored by the pupil, and then cut out and fastened to the cover of a little folio, by means of "springs" of paper. Within were the words: dustrial Arts in Elementary Schools," by Professor Walter Sargent of Chicago University. This book is not only the latest but the best available on the subject. The result of Mr. Berry's analysis of the book is shown on pages 384 and 385. This chart has been edited by Professor Sargent himself, and may therefore be considered authoritative. The sections on construction, design, and color may not be so immediately pertinent to the work of the month. Their turn will come. The section on representation deserves the most thoughtful consideration of every teacher of model and object drawing. It should be studied in connection with the first column of the chart which has to do with aim and outcome. Undoubtedly we have had too much desultory work in object drawing. Mere practice does not promote healthy growth in power. Efficiency comes from well-directed practice.

GEOMETRIC OBJECT DRAWING. This is not the best term perhaps to describe the kind of work that should be emphasized during the

CHART OF A COURSE IN DRAWING,

TABULATED BY

FROM FINE AND INDUSTRIAL ARTS IN

Aim and Outcome	YEAR	Representation
Young children express ideas by graphic symbols instead of literal representation. They should receive but little criticism or technical instruction. Work with them and for them and encourage them by word and example. Pupils in the lower grades may be led to draw with facility things which interest them, to shape easily handled material into visible expression of their thought and imagination, to gain definite knowledge of typical forms, simple geometric relations, elementary materials and processes, and to discover general distinctions of color. The result should be a habit of using drawing and simple material freely as a means of giving expression to ideas. In the middle grades work loses much of its unconscious simplicity and should be directed more specifically and made a matter of persistent study along a few selected lines. A beginning should be made in forecasting results by means of working drawings and patterns, and from these should be worked out simple objects adequate to a given purpose and of pleasing proportions. Pupils should become able to arrange decorative elements so that the spaces are well related; to match colors, and to discriminate between tones, using given samples. The habits of work which are developed now will determine largely the future attitude of mind of the individual toward the arts. Lead pupils in the upper grades to work in different ways as occasion may require: for example, to make quick sketches for general description, or careful drawings for more accurate explanation; to draw from memory and imagination; to draw from memory and imagination; to consider the best means of portraying particular effects, and the results of different kinds of technique in representation. They should be able to carry to successful completion increasingly difficult constructive problems; to select from possible materials and methods those best adapted to a given purpose; to understand common tools and processes. Encourage them to observe the ways of skilled workers and the technical devices	I <	ILLUSTRATIVE DRAWING — Experiences at home and at school and other interesting incidents. OBJECT DRAWING — Repeated lessons on a few selected subjects to develop a more thorough acquaintance with the objects selected. MATERIALS — Lead pencil, colored pencils, various illustrations for suggestion.
	II and <	ILLUSTRATIVE DRAWING — Personal experiences, school studies, and other interesting subjects. Object Drawing — Toys, birds, animals, and other familiar things. Consecutive lessons on subjects to develop ability to draw the salient characteristics of a few things well. Materials — Lead pencil, colored pencils, various
		illustrations for suggestion.
	IV and V	Illustrative Drawing — Explanation and description guided by questions regarding particular phases of personal experiences, school studies, etc. Continued use of sketch books for gathering data. Object Drawing — More careful study of proportion and of the appearance of objects in different position. Variation in style and method of drawing as suggested by the subject; for example, rapid noting of data in sketch book, free drawing of plants with a few brush strokes to represent the general character, careful pencil drawing to show exact shape, structure and position of plant forms and objects, and memory drawing to develop ability to reconstruct appearances from mental impressions. Mayernals — Pencil, brush, and water colors.
	vi Š	ILLUSTRATIVE DRAWING — Fuller explanation and description of specific aspects of the subjects under consideration. Continued use of sketch books and of illustrations collected to furnish useful data. Object Drawing — Training in representing the appearance of three dimensions in solid rectangular and curvilinear objects, and the beauty of structure and shape of natural forms. Deliberate selection of the style and method best suited to the subject. Materials — Hard and soft pencil, brush, and water color.
	VII and VIII	ILLUSTRATIVE DRAWING — Personal experiences, school studies, etc. Sketch books devoted to the collection of pictorial data relating to different subjects. Object Drawing — Nature drawing with pencil or brush to show general character of shape and growth. Toys, implements and other constructed objects, drawing to show correct main proportions and also the general appearance of the objects when placed in several different positions. Materials — Pencil, brush, and ink and water color, various illustrations for suggestion.

DESIGN, AND HANDICRAFT FOR THE GRADES

NAT. L. BERRY

ELEMENTARY SCHOOLS, By WALTER SARGENT

Construction	Design and Color
ARRANGEMENT AND BUILDING — blocks, toys. Develop imagination, and knowledge of position, relation, stability, precision. MODELING — sand, clay or other plastic material. Familiar forms. PAPER CUTTING — following a line — freehand. Geometric figures, familiar forms. Subjects relating to Thanksgiving, Christmas, Valentine, etc. USEOFRULER — straight edge — line between two points. Measure — whole inches only.	ARRANGEMENT — pegs, lentils, tablets, etc. Repetition in borders and surfaces. Sense of rhythm developed by vocal count or piano playing. Colon — Recognition of six typical colors — R. O. Y. G. B. V. Collection of objects similar in color. Arrangements drawn in crayon or colored pencil — any color on white or gray.
MODELING — sand, clay, etc. General appearance and character of the subject. Use of Ruler { for straight lines. } as a measure — ½" and ¼". Drawing lines vertical, horizontal, parallel, at an angle. Simple patterns — the beginning of working drawing. Paper Cutting — geometric forms and simple patterns. Making Objects — from paper and cardboard. Two dimensions — togs, flags, gift cards, etc. Three dimensions — toy houses, furniture, sleds, etc.	Arrangement — Pegs, lentils, etc. Any simple units, Borders and surfaces. Sense of rhythm developed by vocal count or piano music. Decoration of bookmarks, souvenirs, valentines, holiday greetings, covers with borders, or simple units. Colon — second year — hues. Third year — values. Collection of illustrations. Color scales — five values — selected from given samples. Coloring designs — pleasing combinations of values.
Modeling — tiles and simple pottery in clay. Weaving — mats, rugs and baskets. Patterns — or working drawings in two dimensions — full size and to scale, involving use of ruler compasses and 45° triangle. Making or Objects — from paper cardboard, thin wood, involving knife work and simple book-binding processes. Portfolios, book-covers, needle-cases, letter files, etc.	MODIFICATION OF NATURAL FORMS—
Making Objects of use in school or home from patterns or working drawings. Selection of materials. Methods of construction. Bench work, mastery of tools. Household Activities Use of kitchen equipment. Preparation of cereals and vegetables. Setting and clearing table. Care of dishes. Sewing — basting, stitching, holding work. Doll's clothing — sketches, measurements, patterns.	Bisymmetrical Arrangements— Bilateral arrangement of given forms. Bimanual practice in drawing. Planning book cover by experimentation with different spacings, arranging splints or ruler and pieces of paper to secure pleasing relation of elements. Color—using water color. Varying intensities. Scales of five steps. Matching given tones by mixing.
INDUSTRIAL AND ECONOMIC PROBLEMS— Sketches, plans, estimates, measurement. Materials, processes of manufacture, quality, price. PREVOCATIONAL ACTIVITIES— Agriculture. Woodworking—making simple furniture: chairs, tables, picture frames, cabinets, etc. Bookbinding—portfolios, card catalogues, books.	COLOR — using water color.
HOUSEHOLD SCIENCE and ARTS — Marketing, simple cooking, care of food. Care of rooms, serving meals. Mending, darning, sewing, simple machine stitching. Making underwear, simple dresses. Classification of textiles, appropriate uses. Care of fabrics, hygiene of clothes.	Refinement, harmony. Study leaves, forms, lichens for schemes. Harmonizing of colors by mixing a common element with each. Selection—fitness to purpose, beauty of form, and color furnishings, pictures, vases, etc., for actual need. Buildings, pictures, art objects, chosen for training in perception.

fourth and fifth years, but it will serve to suggest a drawing in which perspective appearances are reduced to the minimum — a drawing which corresponds with one view of an object similar to that known as an elevation in working drawing. The first illustration of Plate VII gives a good example of this type of work. It is the next step beyond the silhonette. Objects chosen for drawings of this kind should present features of interest to children. In this case the rendering of the glass was an especially fascinating problem. This particular drawing is by Nellie P. C. Nyberg, V, Swannscott. Mass. It records an instructive

dren like to try to make things look natural. In this case the difference in the color of the stopple outside and inside the glass, the effect of the high lights on the glass, and other elements involving close observation and experiment in handling, furnish incentives to wide-awake boys and girls. Another example of such work is shown in Plate VIII, a drawing of an opened salmon can by Robert Bixby, VI, West Groton, Mass. The representation of the cover open upward, of the ragged edge of the can where it was cut, and the structure of the can itself adds interest to the game. The same is true of the



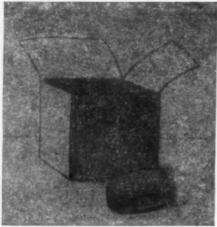




Plate VIII. Children like objects which present a human interest, suggest a story or possibility of some kind.

slip-of-the-eye in the location of the spindle for adjusting the wick. Of course it could n't have gone through the glass-chimney. Otherwise this drawing is as good as a fourth or fifth grade child ought to be expected to make. The original was drawn on gray paper with a strong pencil outline, with touches of colored crayon and chalk to give a somewhat naturalistic effect. It might be well to devote practically all the time for object drawing in the fourth grade to this type of representation, sometimes called "Drawing in the first mode."

PERSPECTIVE OBJECT DRAWING. In the fourth and fifth grades this phase of object drawing should emphasize the representation of solidity and the simpler effects of foreshortening such as those which appear in hemispherical and cylindrical objects. Plate VII shows a drawing of this type, John O. Gay, V, Wareham, Mass. This drawing evinces greater skill than the average pupil in this grade is likely to possess, but it represents the class of objects to attack. Chil-

refraction which has been so well rendered in the drawing of the glass of water with a brush, Plate VII. This is a drawing in pencil by Emma H. Ellis, VIII, Manchester, N. H.

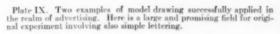
The representation of solid rectangular and curvilinear objects such as should be attempted in the sixth, seventh, and eighth grades is still further illustrated in Plate VIII. The shredded wheat biscuit box with one of the flaps missing and the others turned back at an odd angle will serve as the type of object children least object to—an object which presents some human interest, something for the imagination to take hold of. Pieces of apparatus illustrating chemistry and physics, drawings from toys, especially movable toys, and from utensils with the use of which children are familiar, are also to be commended.

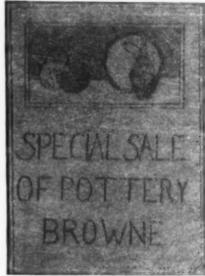
APPLIED OBJECT DRAWING. Here is the most important field for original work in the whole realm of public school drawing. We have learned to apply our design, to apply our working drawing, to apply our studies in color, but we have not as yet learned so well how to apply model and object drawing. Plate IX shows one promising opening, namely, advertisements. The drawing at the left is one of the best of a 'group of thirty drawings, no two alike but all containing the words, "Buy at Towers" or "Buy at Tower's Market." These were made by eighth grade pupils under the direction of Miss Annette J. Warner, formerly of Fitchburg, Mass., who has given special attention to work of this kind and who has achieved unusual success in it. This particular drawing was made by Edna M. Smith.

This is, of course, true in the realm of the arts. Advanced pupils should be urged to make drawings involving perspective effects on a somewhat larger scale than that presented by movable objects. They should attempt partly open doors, furniture, room interiors, and the like. Plate X shows a drawing by Waino Juntunen, the leader of the School Arts Guild last year. When this drawing was made, Waino was an eighth grade pupil, Calumet, Mich.

NOVEL VALENTINES. The valentine cannot be ignored in February. The wise teacher



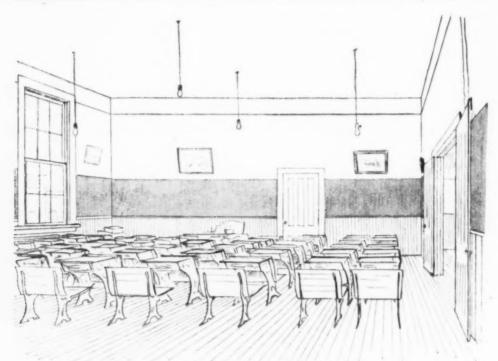




thirteen years old, during three lesson periods of seventy minutes each. The other drawing is one of a series produced by seventh grade children, Calumet, Mich. This particular sheet was made by Paul Peterson, a member of the School Arts Guild. The advertising field presents alluring possibilities. The drawings, to be effective, must not be too elaborate, and the coloring must be strong and harmonious. Here, again, the School Arts Magazine will welcome examples of object drawing applied, and will show its appreciation of such work in tangible form.

PERSPECTIVE EFFECTS. Ambassador Bryce once said to the New York teachers that they should remember that in every schoolroom there were one or two pupils foreordained to be leaders in life, and that these leaders should be fed full all the time, not held back with the masses.

will utilize the overflowing enthusiasm of the children rather than repress it. In these projects originality is to be encouraged, but let us insist on a pleasing embodiment of the original idea. Plate VI shows one or two commendable valentines. That shown at Fig. 2 would work. By pulling the heart suspended from the box the little door opens downward and reveals the salutation, "My love to my Valentine." Plate XI, Fig. 4, shows the mechanism. This valentine was made by Ernest Pothrock, Steubenville, O. Flate VI, Fig. 4 is an example of a portrait valentine. This ingenious device shows the portrait in silbouctte of the young lady (drawn on the sly). On the back of the heart was inscribed, "For you my heart is breaking." The original was in a tint and shade of red. Plate VI, Fig. 5 shows a sealed valentine. The strap sealed with the big heart was made of red paper and would slip on over the



MY SCHOOL ROOM.

Plate X. A pencil drawing by Waino Juntunen, the leader of the School Arts Guild for 1911-12.

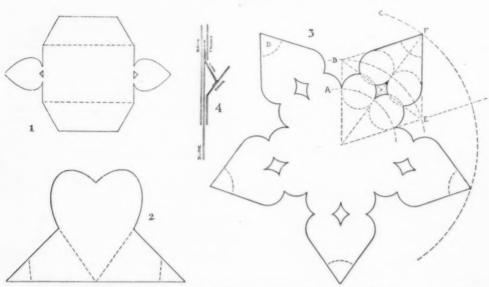


Plate XI. The flats of three novel valentines and a diagram of the "works" of the mail box valentine shown in Plate VI.

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folded letter. This was made by a primary pupil, Bellows Falls, Vt. In Plate VI, all the valentines are by members of the School Arts Guild, and are examples of original ideas embodied in pleasing form.

A DOUBLE-SEALED ENVELOPE. The flat of this envelope is shown in Plate XI at 1. It may be made of any proportion, but the edges of the laps and the points of the hearts, when folded, should come exactly to the center of the rectangular face. The salutation should be written upon a card and slipped inside the envelope. The original of this came from Harry Struch, VII. Calumet, Mich.

A HEART WITH A POCKET. This may be made any convenient size. The triangular laps are folded on the dotted lines, the triangular ends of these being folded and pasted to make the pocket on the back of the heart. The face of the heart may be ornamented at will, and the message written on a little piece of paper and placed within the pocket. The original of this came from Luella, a little girl in a second grade, Anderson, Ind.

THE WILD ROSE OF LOVE. The laying out of this flat is an exacting geometric problem. The steps are as follows:

Decide upon the size of the rose and draw the circle a little smaller. Divide this circumference accurately into ten equal parts. Draw ten small tangential circles. Draw the ten radii from the center tangent to these circles and extend them indefinitely. Locate by experiment two circles of the second series and draw the circle B through their centers. Complete this series of ten circles. Draw the sides of the pentagon of which BE is one. From B E draw lines tangent to the outer adjacent circles intersecting at the point F. Draw the circle C, locating the points of the pentagonal flat. Line in the flat as indicated, and cut on the heavy lines. Fold the five points over exactly to the center. The petals may now be colored, and secured together at the center by a circle the size of which is indicated by the dotted lines at D. Within this rosette envelope the valentine message is

The original of this was made by Clara Zielinski, II, Manistee, Mich., but Clara probably traced it from a pattern made by the supervisor.

A HEART-SHAPED BONBON BOX 1

On white drawing paper draw four hearts, the same size. A pattern — perhaps 4½ inches wide

x 5 inches long — made of heavy paper may be used. Fit the pattern, to save waste. Cut from the paper, and lay aside Nos. 1 and 2, Plate XII, for the top and bottom of the box. On No. 3, beginning at the top and continuing around the heart, at frequent intervals, measure in half an inch and place dots. Connect these dots and cut on this line. On No. 4 measure in and place dots five-eighths of an inch from edge. Connect the dots and cut on this line. Lay No. 3 on No. 1, and draw lightly a line around the inside. Lay

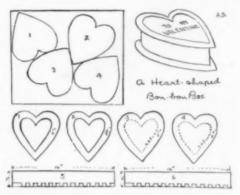


Plate XII. A valentine gift box. Designed by Miss Alice Barrett, Spring Valley, Ill.

No. 4 on No. 2, and draw lightly a line around the inside.

The decorating of the lid of the box will depend upon the teacher. A heart-shaped wreath of little blue forget-me-nots, with "To My Valentine" in the center, is very pretty.

Cut two strips 16 inches long x 1 inch wide from the white drawing paper. On strip No. 5 line lightly, with the back of the scissors' point, a line one-quarter of an inch from the lower edge. Then cut to the line at intervals of one-quarter of an inch, making laps. Cut away every alternate one with the last three at the left-hand end. Repeat the process with strip No. 6. Apply paste around the border of heart No. 1. Crease strip No. 5, 834 inches (the three-quarters of an inch for the lap) from the left-hand end, and, with the crease at the top in the middle of the heart, bring the strip around on the line on heart No. 1, lapping the three-quarters of an inch at the lower point. With the laps pointing toward the outer edge, paste them to heart No. 1. The strip now forms the side of the lid of the box. Slip rim No. 3 over, and paste over the laps. Follow the same directions, using heart No. 2,

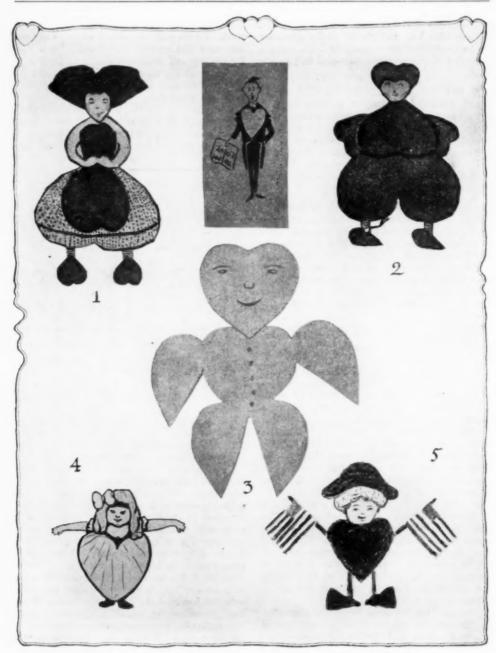


Plate XIII. Comic valentines designed by school children in various parts of the United States.





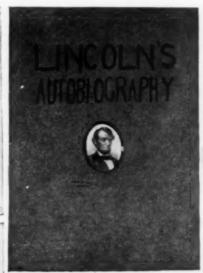








Plate XIV. Six examples of good decorative covers for patriotic papers by members of the School Arts Guild.

strip No. 6, and rim No. 4, and the bottom of the box is made.

Filled with candy, made at home, or in the Domestic Science Room, the children will be much pleased with these valentines.

COMIC VALENTINES. In this field the teacher must remember the scriptural injunction, "Be not overcome of evil, but overcome evil with good."

Plate XIII gives us a few comic valentines designed by children.

1. "Little Dutch Girl," by Martin Zeller, V, Ottawa, Ill.

2. "Dutch Boy," by Virginia Connell, V, Ottawa, Ill.

These were finished in water color with strong ink outlines.

"The Singer" is an anonymous drawing; even the name of the place from which the paper came was not given.

3. The creature in the center of the plate was designed by Agnes Jahr of Davenport, Iowa. He was called "A Hearty Greeting."

4. The little girl making a courtesy is an original design, by a seventh grade pupil, Taylor School, Davenport, Iowa. The original was double

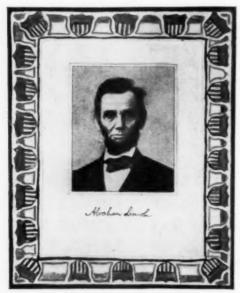


Plate XV. The design of an appropriate decorative frame for portraits of national heroes. Here is a good problem for bright grammar grade children.

and hinged at the top of the head. Within was written:

"Oh, how bright my eyes would skine If you would be my valentine."

5. "Baby February" is the name of the sixth creature. This is an original design by Eugene Robertson, eight years old, Wakefield, W. Va.

PATRIOTIC BOOKLETS. Every year during the month of February an increasing amount of time is given to the making of booklets based on the lives of Washington and Lincoln. In Plate XIV are reproduced six examples of booklet covers submitted in last year's contest. The first of these, entitled "Flags," is by Edgar Erikson, VII, Manistee, Mich. This is especially commendable for the way the symbols are managed. The shield is a little low on the page, but otherwise the cover is an excellent example of seventh grade work.

Lincoln's autobiography was the work of Maud Ward, VII, Sinking Creek, State not given. This is a well-spaced cover.

The Washington cover at the left is by Mildred Henley, VIII, Carthage, Ind. It was awarded the first prize in last March's contest.

"February Birthdays" is a cover by Ruth Tysen of the Staten Island Academy. This is especially commendable for the way the shield is managed and for its good spacing. The other George Washington cover is by Mary Williams, VI, Calumet, Mich. Here, again, the management of the elements of the flag for decorative purposes is a vast improvement from the traditional two flags with their staffs crossed.

The remaining illustration on the plate is a page from Edgar Erickson's booklet. Here again the arrangement of the national colors is worthy of emulation.

DECORATIVE FRAMES. A good problem in design for bright grammar grade students is the making of a decorative frame for portraits of Washington and Lincoln embodying appropriate symbols after the manner of the newspaper and magazine artists.

The frame shown in the illustration (Plate XV) is not a very good one, but will serve as an illustration. A slight modification in this design, had the pupil thought of it, would have given the shields alternating with the old liberty bell, and the result might have been an effective border.

CLASS BOOKS. It is time to begin to think about attractive features for parents' day, the graduation and the exhibition at the end of the school year. The doing of special work for such occasions is not to be unreservedly recommended. The thing to be recommended is the doing of

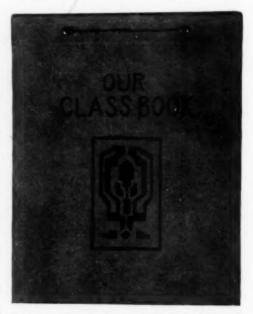


Plate XVI. The cover of a class book made by eighth grade pupils, Baltimore, Md.

every piece of work well. The gathering of the best work together in attractive form should be encouraged. One such form is the class book. One of the best of those received last year came from Olivia F. Keach, Supervisor of Drawing, Baltimore, Md. It was made under the immediate direction of Miss Sarah E. Seager, an eighth grade teacher in school No. 85. The cover of this book is reproduced as Plate XVI. Unfortunately the beautiful coloring does n't appear. This book contained the following features:

1. A well-lettered title-page.

2. The class register, giving the names of all the children in the class.

3. List of authors. The names of all the children who had a part in the making of this particular volume. (Other groups of children made other volumes.)

4. The class song.

An arithmetic section, containing half a dozen of the best arranged, most clearly illustrated, and most accurately written papers on the subject.

6. Geography section. This contained an illustrated article on "Trails, Roads, and Railroads." Another on "The Leading Agricultural Products," and a third on "Intercommunication."

7. The history section, containing essays on the "Missouri Compromise" and the "Battle of Gettysburg."

8. The English section, composed of three essays: "My Ideal," "The Story of the First Hinge," and "The Celebration of Arbor Day."

A grammar section, containing several wellwritten papers.

Of course the list might have been more extended, but enough topics were included to give a visitor a fair idea of the range and quality of results secured in the regular classroom work.

The papers were handsomely bound between covers properly made upon a cardboard foundation.

High School - Freehand

An excellent problem for wood-turning in the high school is the tray or bowl. The plate on page 395 shows six suggestions for such a problem.

In presenting this to a drawing class which it is assumed will make later in the course the articles designed, consideration must be given to the size of the wood from which the article is to be made. Its thickness will regulate the depth of bowl possible; its width, the possible diameter. The shapes suggested in the plate show the simplicity of forms which is always desirable. Complicated curves and combinations of angles and curves are to be

avoided. Large simple sweeps of line, based on the elliptical or on the oval curves are preferable to broken and confused contours, both from the standpoint of practical making and final appearance.

Modifications of the forms here suggested are easily made either as to depth or diameter, or

both, giving wide range of shapes.

Practical details as to the exact thickness of wood at the edge of the bowl or in the center can be easily settled by the teacher of turning.

Each student should, after a blackboard talk by the teacher and a general consideration of this problem by the class, produce an individual sheet of six trials of the type of tray or bowl he desires to make, made full size, the best of which shall, after correction, be carefully redrawn. A second drawing, in duplicate, should be finished for the turning-room, or an accurate templet made of thin card.

The finished drawing should be considered worthy of a well-placed and carefully drawn margin line and a good title with the maker's name in excellent lettering.

The problem to follow this will consider the perspective rendering of a turned bowl or tray from the side view or section.

HAROLD H. BROWN, University of Chicago.

High School - Mechanical

MOULDINGS. A moulding as an architectural ornament or member, varying in contour, is important.

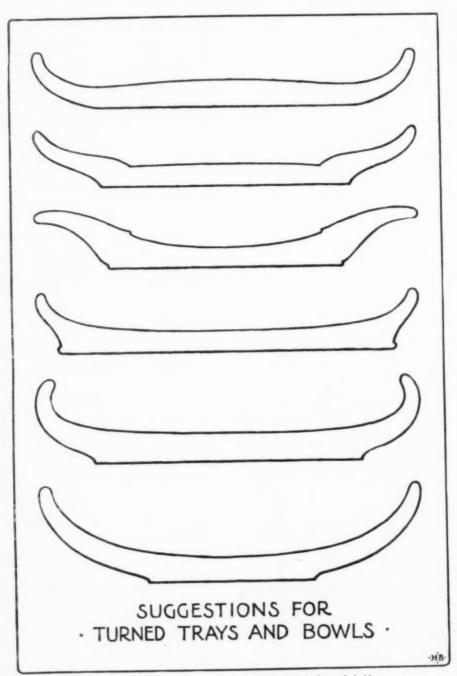
The purpose of mouldings is twofold: first, they give variety to the outline of the principal divisions of an order, as the base, capital, entablature, etc.; and second, they serve to divide the vertical surfaces and cast shadows, thus preventing monotony of surface. The lines of a building depend upon the light and shade and the strength and depth of shadows, and the character of the general outline.

The principal mouldings are shown in Plate XLV. In the Echinus first locate the tangent lines AB and BD. Draw AC parallel to BD. Make CE equal to DC. Divide AC and AB into equal parts and through these divisions from E and D draw lines. The intersection of these lines will give the desired points of the moulding curve. Sheet 10 x 14 inches.

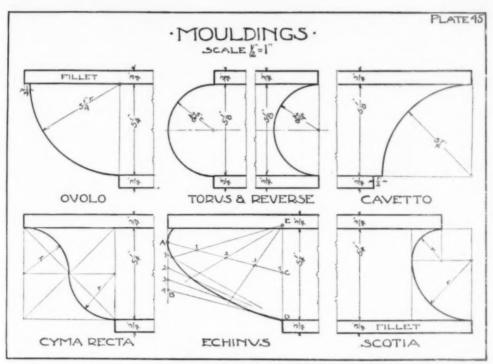
Plate XLVI shows the application of the classic mouldings to common types of wood mouldings in house construction.

Plate XLVII shows the Tuscan Order and its application to porch construction.

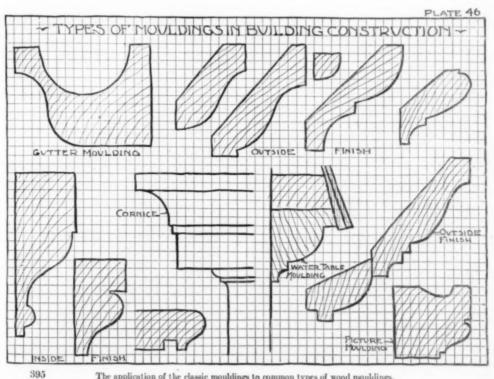
The entablature is taken as the basis of measure-



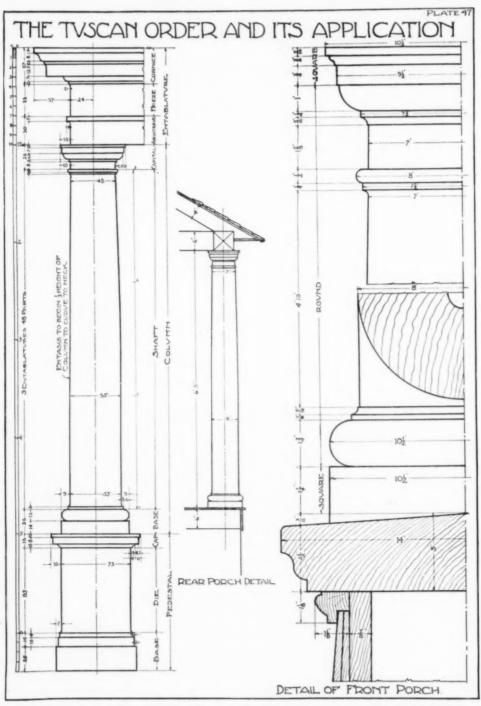
The shapes suggested show the simplicity of forms which is always desirable.



The principal mouldings are here illustrated.



The application of the classic mouldings to common types of wood mouldings.



An ill-proportioned classic column is inexcusable. Any attempt to "improve" a classic order is an impertinence.

ment and is divided into one hundred parts. This scale unit is called the Entablature or "En," and its parts are, where necessary to show more minute divisions, subdivided into tenths, which are expressed decimally.

Another system of measurements, often used, is based upon the unit called a module, which is equal to half the diameter of the column at the base. For small divisions this module is subdivided into twelve, eighteen, and sometimes thirty parts. Reference, Vignola and Palladio.

This plate shows a rear porch column and a front porch column drawn to a scale of $1\frac{1}{2}$ inches = 1 inch and full size respectively.

HARRY LEROY JONES.

Shop and Home

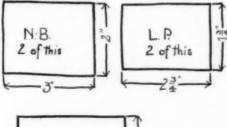
IV. BOOKBINDING FOR BEGINNERS

PROBLEM IV. MOUNTS AND COVERS.

Time, six hours

Note. — The articles in this problem require the same materials as those in Problem III (see last October number). Each article has two foundation pieces covered by a single piece of vellum, forming a hinge between them and lined with marbled paper.

A. A Calendar Stand. First make or secure a calendar. It should be of small size. If desired, a picture may be used with the calendar, but it



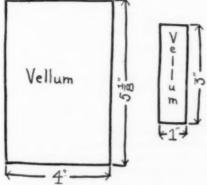
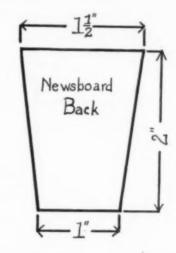


Plate XVII. Freehand sketches of the parts of a simple calendar mount.



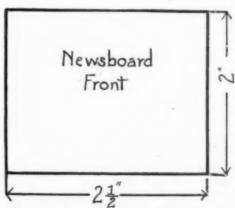


Plate XVIII. The foundation pieces for an easel mount.

should harmonize with it in size and color. In such a case plan to have the space between the two much smaller than the margins, so that the eye will take them in as a group, and not as two separate objects. Decide on the margins as described in Problem II, and thus arrive at the proper size for one of the foundation pieces of newsboard.

Make a dimensioned sketch of this piece, and plan to have two made of newsboard. For the outside covering plan a strip of vellum which shall be long enough to cover both pieces of newsboard when placed about one-eighth of an inch apart, and to make half-inch laps on each side and end. Plan a strip of vellum about an inch wide and as long as the width of the foundation pieces to form the back of the hinges; and two pieces of lining paper, each one-eighth of an inch smaller in both directions than the foundation. Make dimen-

sioned sketches of these pieces (see Plate XVII), lay out and cut all parts.

In the center of the narrow strip of vellum mark off a space one-eighth of an inch wide, extending lengthwise of the strip. Apply paste and lay the

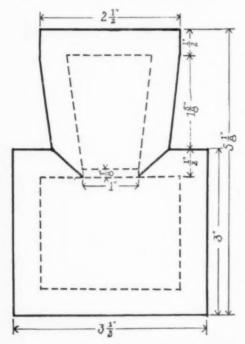


Plate XIX. The flat of vellum for covering the foundation.

two pieces of newsboard on the vellum and with edges against the lines drawn. Press hard on the newsboard, turn it over, and rub down the vellum. A hinge is thus formed for the two pieces of newsboard. Lay these pieces on the large piece of vellum and draw around the whole. Apply paste to the vellum inside the pencil lines. Lay the double foundation on the pasted surface with the narrow strip of vellum on top. Rub down the outside surface very hard, leaving no wrinkles or rough places; clip the corners as described in Problem II, paste the laps, fold them over, rub them down, and line the mount with the pieces of marbled paper. Connect the front and back halves of the mount by a strap of vellum pasted to the inside of each. Finish by pasting on the calendar and picture.

B. Another Calendar Mount. Plan the back standard to be smaller than the front instead of the same size. Plate XVIII suggests a suitable trapezoidal shape. In this case the vellum must be of the same length as before, but cut to fit the different widths of the newsboard (compare Plate XIX). Plan a narrow strip of vellum to line the hinge, as in A. Paste this piece and the outside covering as before. Cut the lining paper of the correct shapes and apply to the back.

Note. — If the calendars are made for Christmas, a most appropriate time, the children are sometimes desirous of decorating with Christmas seals. These are not so desirable as a decorative picture, but if the teacher feels that to forbid their use would be dispiriting to the child, she should insist that only one seal should be used and that on the back of the standard where it will carry its message, but will not detract from the appearance of the face of the mount. An envelope might be made in which to present the calendar, and the seals used on the outside of the envelopes.

C. A Needle-book. This consists of covers with leaves of flannel. Decide upon the size of leaves, which should not be too large and in good proportion. One piece of flannel should form two leaves, as in booklets described in Problem I. Plan the covers to be one-eighth of an inch larger in each direction than the leaves. These should be constructed like the calendar mount already described in A, but the space between should be greater, perhaps three-eighths of an inch. Make dimensioned sketches of all parts. The parts should then be laid out, cut, and pasted. Finish the edges of the leaves by pinking (cutting in small points). Four leaves are sufficient. Sew them to the cover as described in Problem I.

D. A Covered Memorandum Pad. Secure a small pad. Plan covers, as described in B, which shall be about one-eighth of an inch larger in each direction than the pad. When the covers are finished, paste the pad firmly to the inside of one cover. If desired, loops of vellum to hold the pencil may be pasted on the side of the pad, as described in Problem I.

FLORENCE BEAN.
Assistant in Manual Arts, Boston, Mass.

Silversmithing

III. HOW TO MAKE A SILVER CREAM PITCHER WITH AN OCTAGONAL BASE¹

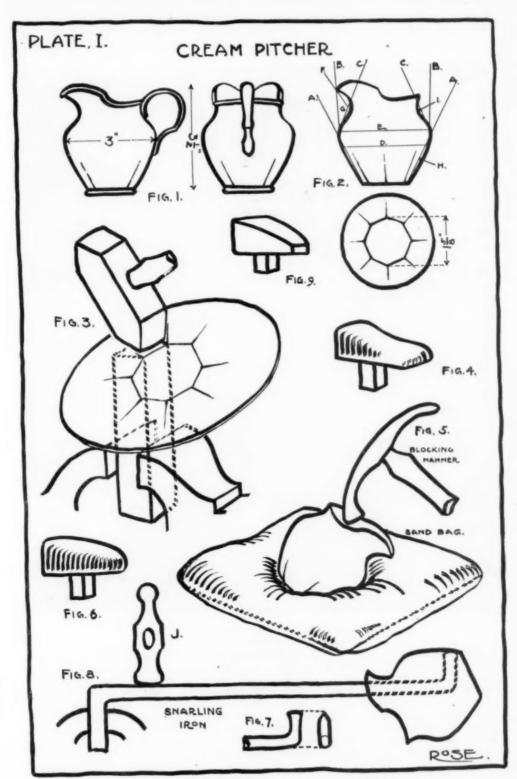
BY AUGUSTUS F. ROSE AND FRANK W. MARSHALL

Rhode Island School of Design, Providence, R. I.

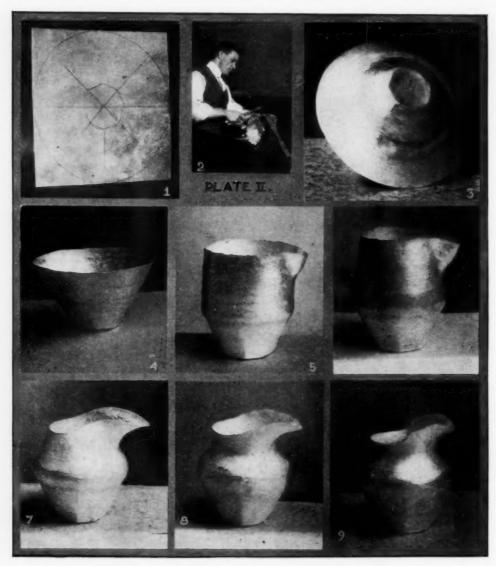
Note. — In describing the following process it is assumed that the fundamental principles of raising, as well as the elementary terms used, are understood.

To determine the amount of silver necessary for this pitcher, add the height to the greatest diam-

¹ This is the third in the series of illustrated articles on Silversmithing which Mr. Rose is contributing to the School Arts Magazine. The first, "How to make a Teaspoon," was published in the School Arts Book, December, 1910; the second, "How to make a Porringer," in the October number, 1911.



The silver cream pitcher and various steps in the process of producing it.



Various steps in the development of a silver cream pitcher with a polygonal base.

eter of the pitcher, as shown on the drawing (Plate I, Fig. 1). As this is $3 \times 3\frac{1}{2}$ inches, a piece $6\frac{1}{2}$ inches is needed and the thickness should be No. 20 Brown and Sharpe gauge. Using a pencil, draw the diagonals of the metal to find the center. From this center with a radius of $3\frac{1}{4}$ inches describe a circle. With a pair of shears cut the piece of metal to the circle; next describe a circle from the same center and lay out an octagon the exact

size called for by the drawing (Fig. 2). Lines are then drawn radiating from the center through the angles of the octagon to be used as guides during the raising. These lines are drawn first with a pencil, and then scratched lightly with a scratch awl to insure permanency (Plate II, Fig. 1).

If the metal is hard, it should be annealed or softened. It is then placed over the crimping block and crimped, as shown in Plate II, Fig. 2.

After this is done, the raising is begun with a wooden hammer, using a piece of hard wood held in the vise as an anvil (Plate I, Fig. 3).

At first the angles need not be very sharply defined along the radiating lines, but the shape of the bottom must be carefully kept.

After raising about three-quarters of an inch in this manner, the work is continued over an ordinary steel or cast-iron raising anvil, and carried on as though the form was to be round, using a steel hammer after the first few courses. Frequent annealing is necessary to keep the metal soft. The raising operation is continued till the sides reach an angle equal to the line A in Fig. 2, Plate I. The first few courses of each raising operation should be done over the wooden form.

At this point a planishing hammer is used to remove the heavy marks from the raising hammer. This should be done from the base up to a little beyond the level D (Fig. 2, Plate I). By doing this at this time it makes the final planishing much easier. Care should be taken to keep the bottom flat and the sides at the same angle all around, and then scratch a light line with the surface gauge at the height of line D (Fig. 2, Plate I).

Now take a pair of calipers and compare the diameter with the diameter of D on the drawing (Fig. 2, Plate I). From this point the raising is again started over the metal anvil and continued till the sides reach the angle B (Fig. 2, Plate I). Scratch line E as before, and after comparing again with the drawing, draw the top in from that level till the diameter at the top is a little less than the top of the finished pitcher.

During this stage of the work allowance must be made for the nose of the pitcher. The metal is drawn in at all points excepting from F to G (Fig. 2, Plate I and Fig. 5, Plate II). Now begin to raise downward along line FG to meet the raising from E at G.

The top is now roughed into shape, cutting away surplus stock excepting at the nose. Begin again to raise from the top downward and from the level D upward till the sides are curved like the drawing (Fig. 2, Plate I; see also Fig. 7, Plate II). Shape the nose at the same time, using hammers and tools to fit the varying curves, as suggested in Figs. 4 and 6, Plate I.

The lower parts of the sides at H and I (Fig. 2, Plate I) are next rounded or blocked out with a blocking hammer (Fig. 5, Plate I). The pitcher is placed on a sandbag or engraver's pad, and the metal is driven out from the inside.

The angles rising from the corners are now brought into shape a little more by the use of the snarling iron (Fig. 7, Plate I). The snarling iron is held in the vise as shown at Fig. 8, and the pitcher is held over the point of the iron. A light blow from a hammer, as shown at J, causes the end of the iron to vibrate and drive the metal out as desired. This must be done with great care to avoid over-stretching of the metal, which would result in some places being thinner than others. After this has been done, the top is trimmed to shape (Fig. 9, Plate II), and the pitcher is ready for the planishing.

A tool like Fig. 9, Plate I, is used for the flattened sides and angles. The angles at the bottom must be accurately formed first and then those rising from the corners. Do not make them too sharp, but keep them spaced evenly. Rounded tools or forms replace the angular ones as the planishing progresses and the angles gradually verge into the round shape. Various-shaped hammers are employed as necessary.

In order to finish the body it is now filled with a pitch composition and again planished, giving it the required surface.

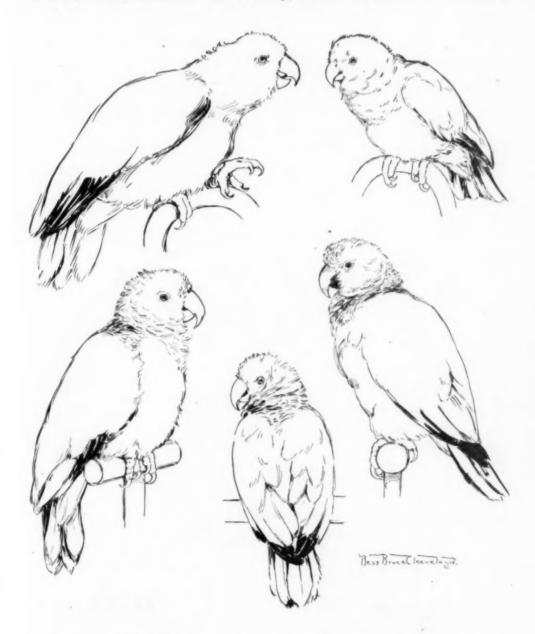
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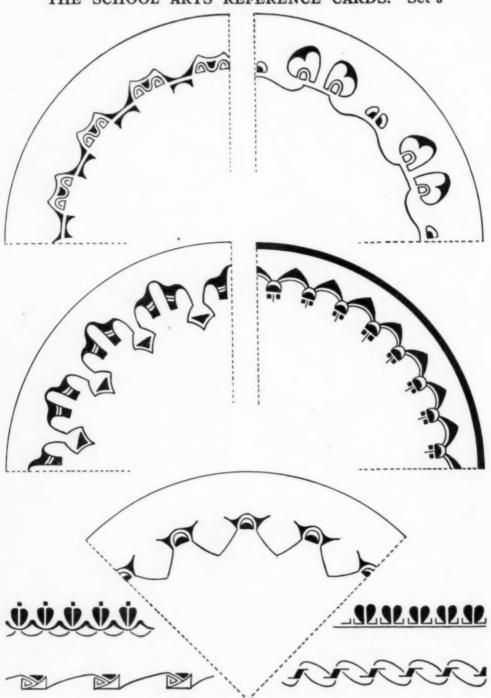
Sheet 5. EAGLES. Four studies from a live golden eagle. Other eagles vary chiefly in the markings of the body.

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Sheet 6. PARROTS. A parrot is notably different from other birds in its beak, eyes, and feet. In drawing one must pay special attention to these details. Parrots have an uncanny air of intelligence.

THE SCHOOL ARTS REFERENCE CARDS. Set 5



Sheet 3. Borders in line and spot, for the decoration of china.

By Max Hagendorn

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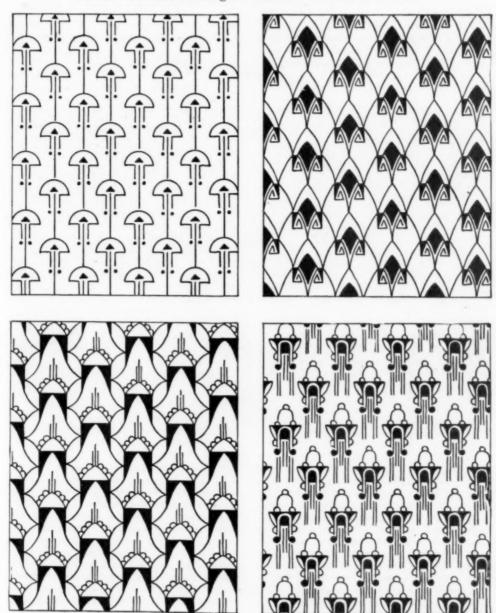
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THE SCHOOL ARTS REFERENCE CARDS

STANDARDS FOR COMPARATIVE STUDY

Set 5. Decorative Design. 10 Sheets in black-and-white



Sheet 4. Surface patterns in line and spot, for end papers or other printed fabrics. By Max Hagendorn



"I am not looking for any more ideas; but I would like to learn how to execute well some of those I have." — A Grade Teacher.

By George W. Eggers

COLOR SCALES

What We May Expect of Them. How We Can Get It
SECOND* PAPER

PART I. THE USE OF COLOR SCALES

A KNOWLEDGE of color and color properties as arranged in the scales of hue, value, and intensity helps us in many ways, among them the following:

1. In defining and remembering color arrangements, color intervals, and colors, when circumstances make it impossible or undesirable for us to use pigments—

(a) At art galleries and exhibitions.

(b) At the theater and other places where beautiful color arrangements are presented to us for a brief moment only.

(e) In working from nature when conditions do not permit us to make studies in color.

In analyzing color arrangements in paintings, illustrations, and products of art industry of all times —

(a) For principles governing beauty of color arrangement.

(b) For principles governing expressiveness in color arrangement.

3. In making color arrangements in creative work of our own (in which the color scales enable us to systematize and economize our effort).

DEFINING AND REMEMBERING COLOR by the aid of the scale and symbols. Color notes may be written right out upon a reproduction of the painting studied, as in Fig. 1. This is a postcard reproduction of Farquharson's "Dawn." notes upon it were made in the Walker Gallery, Liverpool, where the painting hangs. The values are not indicated, because the reproduction in this case shows them pretty adequately. There is a certain convenience and precision in putting the color notes directly upon the reproduction in this way, but usually we would rather preserve the reproduction without this disfigurement. In such cases the notes may be made upon a thin sheet of paper fitted over the print, or upon a rough outline sketch of it, or in the margins (if such there be) around it. Making notes of this kind has proven most useful to the writer in two ways: in aiding the memory to a distinct recollection of the picture studied, and in disclosing the plan underlying color schemes which seemed at first to be without rhyme or reason.

In the study of nature the scales and symbols help us in the same ways. In using them we not only make record of the things we wish to remember: we also become conscious of nature's types of combinations. Fig. 2 is a rough drawing of a portion of Rome and the Tiber, made early in the morning, when colors were changing too rapidly for paint or crayon. These notes, together with a photograph made at the same time, bring back the picture pretty distinctly after five years. Fig. 3 is from a drawing made out on the ice of Dunkirk Harbor with the thermometer around zero. This slight sketch became the basis for a fairly substantial composition in oils, made in perfect comfort indoors a day or two later! Fig. 4 is a note from a fragment of old embroidery. The information which it carries, together with the mental image it brings back, would enable the one who made it to reproduce quite adequately the color impression he received when he saw it. These notes happen, in every case, to have been made without the scales at hand.

Analyzing color arrangements by the aid of scales. In studying the ways in which color has been used by artists, confine yourself at first to the work of one school, or even of one painter. To illustrate a way of approaching this kind of picture study, we reproduce a number of works of Henri Rivière, a contemporary French artist of great power. They are especially suited to our purpose here, because whatever effect Rivière gets in these is secured by hue, value, and intensity in flat color. There is no modeling, no brush work, and only the slightest and directest suggestion of the planes of perspective.

Because it is not possible to reproduce these compositions in full color, we must confine ourselves to a consideration here of values and value principles only. What is true of value, however, is generally true of hue as well, and, after all, we are trying only to show the kind of conclusions this analytical study of the use of color leads to.

Some of the simple and obvious facts which even children in the grades can observe in these works if they measure the value intervals with a good value scale, are that—

- There is no black and no white visible in most pictures.
 - 2. A comparatively small section of the value
- 5. Lightness or gloom is not altogether dependent upon the key of the picture. Either full daylight or evening may be suggested by a key of middle value. The effect is gained partly by the way in which the values are arranged and partly by the value of the smaller accents. See the radiance of the heavenly host in Fig. 6; compare with it the moonrise, Fig. 7.
 - 6. With a comparatively small number of



Fig. 1. Dawn, Farquharson; Walker Art Gallery, Liverpool.

scale is used in any one composition. These illustrations, for example, may be said to be "keyed." Some are keyed "darkish," some "lightish," some "medium." Compare Fig. 5 with Fig. 7.

- The value intervals used are often much slighter than even the value steps of the sevenvalue scale.
- 4. Provided the tones are kept very flat and simple, a value difference will be perceptible for a long way. Some of the slight gradations in "The Forest," while hardly more than visible near at hand, are just as visible when seen twenty feet away.¹ This refutes the common notion that a work must be strong in its contrasts in order to be seen at a distance.

values the artist gives an impression of the vast value range of nature. Outdoors we usually get longer value scale than the one we use in painting, because such effects as the sunshine on a white cloud, on a snow-bank, or on a white wall are many, many degrees lighter than the "whitest" white obtainable by mere pigments. The artist, however, with four or five values suggests this whole range. See Fig. 8.

How this applies to hues and intensities. Color study of this kind at once suggests application to the pictures in art museums and galleries. In addition to these, the more generally available materials would include: good color reproductions such as are found in the Century, Scribner's, Harper's, McClure's, and other general maga-

¹ Proven by numerous tests with this composition and others (in the original reproduction, of course, from which this halftone was made).

zines; in the Studio and other art magazines; in the numerous books illustrated beautifully in color with which the modern market abounds;

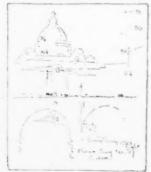


Fig. 2. A drawing from nature with color notation.

in that admirable series of color reproductions of great pictures, the Seeman Prints; ¹ in such pieces and samples of fabrics as are found in the upholstery, tapestry, and dress-goods departments of



Fig. 3. Winter at Dunkirk. A drawing from nature with informal color notes.

the stores, and even in the trunks in the attics of our own homes.

Children studying pictures in this way under the intelligent leadership of the teacher could discern for themselves such truths as these: That Rembrandt (for example) did not seem to become interested in the whole color field, but keyed his pictures most frequently in O, YO, or Y; ² that he seems to have loved a prevailing value of HD or, more often, D; that within this his lights are small and brilliant but seldom lighter than LL^T; that he relieved his O or Y key richly with R, RV, RO, and with YG and sometimes G. Don't tell the children these things; the information, while interesting, is not half as important as the experience of getting it! When you and I go for the sixth time to see "Hamlet" played, or read "The Three Musketeers" for the tenth, it is not because we are in quest of information, it is because the experience is worth our while.

Comparative study of two painters comes when the children discover that Corot painted in quite

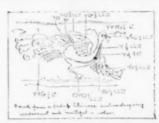


Fig. 4. Notation of form and color as found in fabrics. In this case the embroidery was laid over a piece of glass with a light underneath. The paper was laid over the embroidery and traced with pencil. Blue printing may be used instead of tracing.

a different key from the one which Rembrandt used even in his landscapes. Corot's key was oftenest in the hue of G^{1}_{4} or BG^{1}_{4} —his values ranged about M. His paintings have larger areas of light than Rembrandt's. His pictures for these reasons are more like out-of-doors. Some child may discover that Corot did love occasionally to run a deep LD value into a tree trunk or some such place—in order to make the sky shine more brightly—that he enjoyed bringing a tiny red or yellow cap into his cool landscapes, thus cheering them as with the merry note of a bird.

The children might observe that Monet and the modern impressionists sometimes key their pictures in B or BV, and often paint in the highest possible key; that in this way they get still more the suggestion of sunshine and air, while they lose in mystery and richness.

¹ The Seeman Prints, a series of four thousand excellent color reproductions of paintings by great old and modern masters, procurable at from twenty-five to thirty cents apiece; American agents, Geo. Busse & Co., 12 W. 28th Street, New York City. Obtainable in Chicago at Marshall Field's Art Department or A. Kroch's Bookshop, Monroe Street, near Wahash Avenue.

New York City. Obtainable in Chicago at Marshall Field's Art Department or A. Kroch's Bookshop, Monroe Street, near Wabash Avenue.

In Dr. Ross' terminology for hues he adheres to a uniform order in the compound color names like OY (Orange Yellow) and VR (Violet Red). It must be borne in mind that in these compounds both words are to be thought of as nouns, Orange Yellow means Orange plus Yellow, not a Yellow with an orange tendency; the latter description would suggest a color chiefly yellow. Orange Yellow in our terminology means a color which is just as orange as it is yellow. We have deviated from Dr. Ross' usage in admitting the use of YO as an equivalent to OY, RV to VR, BG to GB, etc.; hoping thereby to emphasize the fact that these compounds are composed of two co-ordinate nouns whose meaning is unchanged even when their order is inverted.

If they look through the color plates of the December number of the *International Studio Magazine* they will find one composition keyed in a pale, warm, gray-yellow (that is, YO½LL^T), another in strong red, another in B, with BV and BG and strong value contrasts, and still others of different keys and ranges.

Hue has another property which color analysis may discover — but only for the older pupils, no is keyed in a deep and mysterious blue with suggestions of blue, green and violet. The next illustration is Golgotha. From the rich and tender colors of the preceding series we are let down to a scheme of hucless neutrals. The effect is remarkable. As one student declared, "It is the very color of sobbing!" The last picture is the Apotheosis. This is keyed in a warm and glowing orange which cheers like the ruddy glow from a fireplace.



Fig. 5. Illustration "Forest," by Henri Rivière. This composition is expressed in four nearly flat values. It suggests a dozen. Note how slight the difference between some of these. Note how much is told by shapes.

doubt — the power of suggesting mood. We say we "feel blue." There is a long-recognized connection between color and emotion. Some color is saddening, quieting or depressing in its tendency, some stimulates and excites us.

Rivière makes great use of this power of color in the "Marche à l'Étoile." There are fifteen full-page illustrations to this allegory. They represent the Christmas Star above the desert; its discovery in turn by the Shepherds, Soldiers, Lepers, Slaves, Women, Magi-Kings, and Fishers, — of the whole world, who follow it to the Manger. The whole series up to the point of the Adoration There is no room for doubt as to Rivière's intention in the arrangement. He was working for more than "beautiful color harmony."

Of course a great illustrator like Howard Pyle makes striking use of this mood suggestion. Almost every one of Pyle's illustrations is an example of it. One of the most impressive is to be found in the frontispiece for Harper's, May, 1905, with the caption, "The Crown Prince Karl, Dead by His Own Hand." The tragic discovery occurs in a room, carpeted, furnished, and darkened by heavy fabrics of bronze and purple hue, which divide at one point only, in a long gash of

pallid yellow light. The half lights within the room glitter on the dead face of the prince, on the steel weapon which has fallen from his hand, and



Fig. 6. An apotheosis from "Le Juif Errant," by Rivière. There is no white, no "high light" even, in this composition, yet see the radiance of the heavenly group. This is achieved, too, without the use of any contrasting black.

on one or two other details which accentuate the tragedy. All other forms and contours are lost in the gloom and mystery which fill the whole composition.

Making color arrangements — The principles. The beauty of any color seems to be chiefly or wholly dependent upon the colors used near it: a color which under one set of conditions is warm under another set may be cool; similarly it may veer from light to dark, from intensity to neutrality.

"Beautiful color," therefore, means beautiful combinations of color. Even when in our minds we "isolate" red we are thinking of its redness as compared with the rest of the color circle. It has many times been said, "Order is beauty's first law." We set things in order by grouping the like ones or else by grouping the unlike ones.

The dishes on the pantry shelf are stacked in groups: the soup-plates make one group; the dinner-plates, one group; the saucers, one group, and so on. Each of these groups represents one form of order, the combining of like things. The whole dinner set represents the other kind of order, the combining of things unlike. It consists of soup-plates, of dinner-plates, of saucers, platters, etc.; the set exists only when these different elements are present.

Color combinations are of two kinds only: combinations of unlike colors, those from opposite places in the color circle, and combinations of like colors, those from neighboring places in the color circle.

Opposites. Now, when the eye takes in a color

combination, it probably does not see both the colors at the same time, but goes back and forth from one to the other. When the colors are in such relation to each other that the eye gets pleasure from this adjustment from one to the other, we say the combination is beautiful. "Complete change of occupation is rest," says the physiology book. In going from red to the absolutely different hue of green, the eye experiences a "complete change of occupation." This is no doubt one reason why combinations of opposites give us pleasure.

But, if the colors differ too widely, the eye soon gets tired of the constant readjustment, and instead of stimulation and rest, we get fatigue. Some people enjoy this sensation of strong readjustment longer than others do, and combinations accordingly may give pleasure to them, but appear "crude" to the others. In other words, some people like their color "stronger" than other people; to these the combinations seem "monotonous" which the others would call "harmonious." Too much "harmony" is monotony; too much "variety" is discord.

Different kinds of "opposites." R and G may be a pleasing combination. In their full intensities, however, they may call for too complete a readjustment from the one to the other. We may reduce the readjustment but preserve the hues. R½ and G½ (Red, half intensity and Green, half intensity) make a "safer" interval. R¼ and G¼ are safer still. We may move such a color interval so as to get an emphasis of either hue as: R¾ and G¼—an emphasis of R—preserves the interval though changing its posi-

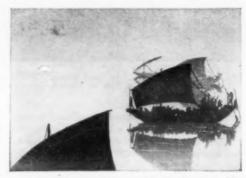


Fig. 7. Illustration "Moonrise," by Henri Rivière. Here the feeling of evening is given by a value lighter than middle value. This is an exquisite embodiment of the idea of tranquillity. How has the artist suggested this? How many values are there here?

tion. R¼ and G¾ also preserves the interval. The same interval moved farther becomes N and G¾. Is this still a combination of opposites?

It is, because, in the first place, we have not changed the color interval; in the second place we will find that our N has about it a distinct suggestion of R, because it is being associated with G. Moreover, this whole thing can be carried farther, and almost the same quality will be preserved in the combination G\(^1\)_4 and G\(^3\)_4. (Of course, the same principle holds if we move the combination toward R instead of toward G.) Any pair of oppo-

Monochrome. Designs or pictures may be made by using a given hue in different values. There is a kind of safety in such an arrangement akin to that found in playing the piano with one finger — you can't strike a discord. Of course such arrangements are not color arrangements.

Neighbors. During all the ages the human eye has gradually been accustoming itself to a kind of color arrangement which is quite different from

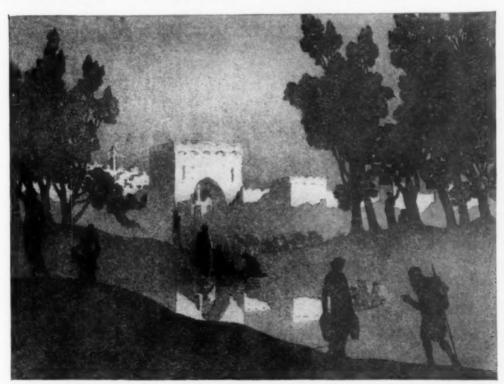


Fig. 8. "A Gate and Pool," by Rivière. What a suggestion of the multitude of lights and colors of the morning! The whole story is told by surprisingly few values, but exquisite drawing. When we study these compositions, we begin to long for paper-cutting again, which separates the problems of technique and taste, so that we can solve one at a time, as Rivière has done.

sites will give us the same opportunities for combination. Variations of intensities, then, are also delicate effects in "complementary" colors.

Summed up, the possibilities of opposites (as exemplified by R and G) are:

R and G R½ and G½ R¼ and G¼

R³/₄ and G³/₄
R and N
R and N
N and G
R and R¹/₄
G¹/₄ and G
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"opposites." Analyze, for example, the color of a yellow apple in sunlight. The sunlight, let us say, is orange in hue. The apple itself is Y. The sun-illumined side will be Y + O. The shadow side, reflecting the blue sky and lacking the hue of the sunlight, will have double reason for being Y + B. The under side possibly reflecting the bright green grass will be Y + C. The borderland between the sunlight and the shadow will be the local color Y. Now let us examine the color range which we see on this one apple. It is YO, Y, YG, G. The world is full of this kind of color

scheme every minute of the day and night. Every object is more or less an example of it; the eyes of the race are adjusted to it and welcome it with the same pleasure with which our ears receive a familiar tune. If the apple is very yellow and the sunlight not very strong, the key will be unmistakably yellow with slight overtones of the other hues; we then have a dominant harmony. If the sunlight is brilliant and the apple rather pale, the key will be less positive, the contrasting blues and oranges stronger and more insistent; we then have analogous harmony.

Sometimes to a dominant or an analogous harmony there is added a note of the hue opposite to the keynote of that harmony — making a kind of combination of "neighbors" and "opposites." This is sometimes effectively done by a small quantity of color of rather high intensity balancing a combination of low intensities of large areas. Example: A twilight landscape keyed in BV, with variations in V and B; the opposite note, a touch of OY, being the glimmer of a lamp in a window in the picture. The opposite note seems to fuse the tones of the harmony into a more perfect unity: this arrangement has therefore been called a perfected harmony.

COLOR COMBINATIONS, THEN, INCLUDE:

Unlikes -

Combinations of opposite hues, the intervals being either great or small according to the intensities used.

Likes -

Combinations of neighboring hues with more or less evident keynote, with or without contrasting note.

It is a great saving of time and energy, if in making our designs and pictures we can say, before touching pencil to paper, whether we intend to make our project a combination of opposites or of neighbors, what shall be its key, and what its color intervals. Indeed to "design" is to "intend," and, this being the case, we cannot truly design unless we do begin our work with some intellectual conception of what we are going to do—a conception from which to deviate if necessary.

AND WHEN A COLOR IS "WRONG," remember it can be so in three ways only, and ask yourself:

1. "Is it wrong in hue?" and there are only two possible ways of being wrong in hue;

2. "Is it wrong in value? Is it too light? Is it too dark?"

3. "Is it wrong in intensity? Is it too strong or too neutral?"

Broken color. Modern painters frequently, instead of painting a flat tone with one solid color, render the tone by a multitude of tiny spots of different colors, which at the proper distance seem to blend into one color and thus achieve the tone desired. This is called painting in broken color. It seems to bring greater light and atmosphere into a composition than the use of solid color does.

EGGERS

In painting in broken color the constituent color spots must be quite as finely adjusted to each other as if they were large areas of color. The color combinations which are most beautiful in design patterns or in color compositions seem also to be most pleasing in broken color painting.

PART II. FORMAL COLOR STUDY IN SCHOOL

Our formal knowledge of color. This may come to us in various ways, namely:

By contemplation (many of us think we learn things in this way).

By constant use of what color knowledge we have — a constant endeavor to estimate color intervals wherever they come to our notice in nature or in art; sometimes with standards at hand, oftener without

By copying scales: this will undoubtedly be of much help.

By mastering the scales so that we can paint them from memory. Bring your scales to the highest possible degree of perfection unaided, then compare them with the standards and correct or verify.

A CHILD'S COLOR EDUCATION begins when he begins to see. It will become a useful instrument for him if he is led into ample color experiences and ultimately to a formulation of his color experiences. If he does not receive some sort of conscious training, color impressions will come to him like many of the other phenomena of the universe — things going on, but of no use to him. Those who can see no use of color education in the schools are usually those who have never had any.

In making use of the suggestions in the paragraphs below, do not isolate them! Color is not a separate bundle of experiences. It is a vein inextricably fused with all other forms of reality. You and I are for the moment only imagining it as separate, that we may study what course it takes through those other experiences and see that this course is continuous.

Let it be understood, also, that the numerals here used have no reference to grades. They represent stages. If an eighth grade pupil has never touched upon color consciously before, he no doubt needs to begin exactly in the manner suggested in I, II, III, and IV. He may pass over these rapidly if his mind is bright — in an hour perlaps, but they are the portal, as it were, to color understanding.

I. Beautiful color environment is the right of the baby from the beginning.

II. Beautiful and brilliant playthings - an environment of beautiful color, including many things which the pupil can pick up and handle as well as others: fruits, marbles, flowers, birds, gold fish, pieces of glass, shells, soap-bubbles, ribbons, pebbles, papers full of variation in value and intensity as well as hue. It is a mistake to exclude either great or low intensities from the

experiences of childhood

III. Experiences in sorting such of the materials mentioned in II as lend themselves to this use. Sorting first perhaps by hue. "Let Jane find all the red ribbons in the box." (To Jane no doubt red will mean anything between vellow. orange, and purple.) It will be well in this experience not to have too many widely different kinds of material for sorting, as this will bewilder the children - nor yet too little variety, since they must learn that color is a property quite separate from substance. It may be well, therefore, while the sorting experience is going on to extend it incidentally to the finding of red things about the room - whereupon it may be discovered that the geranium upon the window-sill is red, the bricks in the fireplace, the cloak on the hook, the cap in the picture. The teacher will make a constant use of color names, not exacting absolutely accurate use of them on the part of the children, however, as yet. It is quite possible that children perceive color distinctions more subtle than we realize but that their language is unequal to the task of naming them, and their necessities do not require that they be named.

IV. The sorting of colors according to three or six leading hues may be followed by some kind of attention to the different kinds of reds and greens and yellows and the like - some of the reds are like apples and some like oranges. Let us next separate our reds (etc.) into little groups of different kinds of reds. This little game may take the direction of a further distinction of hues, or it may become a study of values. It should not be forced in either direction. For these experiences the samples should be available in large numbers and in great variety of color and in considerable variety of texture. They should of course be

actually or nearly one-color fabrics.

V. Mixing colors. There is a contemplative attitude that art suggests which is a valuable asset in life and which color study in many ways induces. A good three-color box (which means one in which not only the red, the blue, and the yellow are clear, but in which their mixtures also dry with richness and life) is a useful instrument for cultivating this attitude on the part of children. Let them drip a brushful of clear rich color into a spot of water and see the color move about and unfold its many beauties of value and form - as mysterious as Jack Frost's work upon the windowpane or upon the oak leaf, and ten times more visible. Let them drip other pigments into the same pool and see the new undreamed-of hues form and move. Encourage them to watch and not to stir the colors. The paints are doing this, not the children! It is not at all important that the children should see pictures in these spots - the colors themselves are the reality. They will watch the colors that play across a bubble in the sunshine. they will watch the sky, or the iridescence of a beetle's wing. They may watch the changing hues here in the same way. Later they may learn how to control these color sprites to carry their messages into pictures. But that is another story. Here they are not sending mes-

sages, but receiving them.

VI. Formal color work must be a light and running accompaniment to the direct color experiences of the children. When the time comes for making scales (in the fourth or fifth grade perhaps?), the teacher will know best whether to begin the scale-making by having the children make arrangements of colored papers or circles of water with the three colors dripped into them. She must not in any event expect too perfect a result here. The children must learn the great truth that a hue may vary toward either of its two neighbors; they will need to learn ultimately which those two neighbors are; and they will already have learned what to mix in order to make them. After this comes the sixhue scale. The informal drip-color value scale (made by dropping a brushful of strong pigment into the foot of a column of water on the paper) is none too difficult now, though a complete value scale involving black would be so. The threevalue scale (LT, M, D) with the D secured by R + B + Y added to the hue being scaled, would be possible after this perhaps.

VII. Analysis of pictures or designs which occur in a few simple flat values; studies in water colors of shells, fruits, leaves, and some flowers for color schemes to be used subsequently in design, notation both in pigment and by name, of the colors in the color schemes so derived: the working (if it seems necessary) of portions of the twelve-hue, or nine-value scale; the use of N and the graying of colors with the three-color box

these experiences now follow naturally.

VIII. Knowledge of hue value and intensity scales, power to use the color arrangements, use of grayed color, study of color in pictures and materials, knowledge of ways of securing tone, power of laying washes, and washes over color—
if we are not too rigid in our technical demands,
all these can be accomplished by the eighth grade,
for there is nothing here which the intellectual
capacity of this grade will not compass. Carried
on more slowly, this might lead us into high
school work. The high school may profitably
work out some of these things in oils, however,
instead of water colors.

The application of these experiences—in one sense the justification of them—is in their use in the handwork. The color schemes of garments made in the household arts courses may profitably be thought out as dominant, or analogous, or perfected harmonies, or as contrasts of

hue of great or low intensity. The brilliant touch of color needed to complete a costume too somber in tone can be definitely and accurately arrived at instead of by "guess" and "trial."

And in the woodwork courses — instead of accepting imitation mahogany, walnut, and goldenoak stains, if we work for color and get it with the materials which have produced all the great color the world has so far seen — red, blue, and yellow, we can perhaps train a generation of wood finishers again who will open new possibilities in this noble industry, either by actually producing or by demanding them. These applications are not invented for the sake of color study; they underlie and give cause for it.

FROM A NEIGHBOR'S CREED

Three things are given man to do: To dare, to labour, and to grow. Not otherwise from earth we came, Nor otherwise our way we go.

Three things are given man to be: Cheerful, undoubting, and humane, Surviving through the direst fray, Preserving the untarnished strain.

Three things are given man to know: Beauty and truth and honour. These Are the nine virtues of the soul, Her mystic powers and ecstasies.

- Bliss Carmen



MILLEDGEVILLE, GEORGIA.

Dear Mr. Bailey:

We have really had a snowstorm down here. The ground was covered, the roofs were white, and the trees proudly wore their feathery garb. I wish you could have seen the children in the Training School! They really went wild. They could for the most part hardly remember ever having seen any snow. To begin with, only half the number came to school at all. The other half stayed at home, not that they did not dare venture out in such weather, but because they want d to stay out in it and enjoy it. Those that did come were rewarded with a holiday, the classes being dismissed at 10.15. My work that morning was in the fourth and fifth grades. Our lesson should have been drawing birds. We are observing those now, but I knew that "birds" would never keep the children's faces turned away from the falling wonder outside. So I provided dark gray paper, white chalk and water-colors, and we proceeded to draw hills with appropriate winter scenic features, and then we put in people just having the best of times in the snow. Before this, when in our landscape work I had given a snow scene it had always seemed to me almost useless. The children enjoyed it, but all they could get was a pretty little washed over piece of white paper, never the spirit of the snow as they did get it this time.

The children were dealing with a present experience. What a difference it makes!

Sincerely yours, EMILIE RUECKER.

STEUBENVILLE, OHIO.

Dear Sir:

Enclosed find a sample of invitation sent out for a school reception.

We served tea and wafers and our receipts from sale of valentines amounted to twenty-five dollars. We intend to place the best picture we can get for the money in the schoolroom.

Very truly,

Eighth Grade, Wells.

PUEBLO, COLORADO.

Dear Editor:

Perhaps a word on how we kept Valentine's Day may help somebody. Formerly we had always provided a box and allowed the children to give and receive valentines a good deal as they chose, — trying to eliminate "funnies," and to see that each child had at least one. But what is one or even six, if your neighbor gets eight!

This year the fourth and fifth grade teachers planned something else. We made valentines of various designs in school until we had as many good ones as there were children in the two rooms. The teachers took possession of these. No store valentines were allowed.

Then secretly the teachers prepared small paper



The point of the heart is tucked through slits in the paper to keep the sheet folded. Opening the letter one discovers the invitation within.

hearts, as many as there were children, and wrote upon each one some direction like, "Look behind the calendar," "Among the leaves of the plants," "Peep into the teacher's reader," "Look on the first shelf of the cupboard." By using the two rooms and halls, we found hiding-places for seventy-five valentines. Also, we purchased, through a friend in a wholesale house, a dozen boxes of pure sugar stick candy for fifty cents,—we could not afford the confectioner's sugar hearts.

The last hour of the day of February 14, the children of the fifth grade came in and sat with the children of the fourth grade. Each child was given paper and pencil and told to make as many words as possible from the words written in colored chalk on the blackboard—"St. Valentine's Day." One girl made fifty words in the ten minutes allowed.

Then the hearts with written directions were passed, and the winner in the word game was the first to rise, read her directions aloud, and go to find her valentine. Others followed in turn. To hear





lassic so fair and so graceful,
The sweetest of all Cobbet maids,
Pray let me count you
My Valentine true.

Then we'll prove that our love never fades.

The third pages of two folio valentines made by grammar school children in the Cobbet School, Lynn, Mass. Printing was done on the school press and the decoration colors added by individual children.

the reading, the children had to keep reasonably quiet.

After this the principal came in with the new school Victrola and played a duet for us.

Last of all, the candy was passed, each child helping himself or herself to three sticks.

Teachers and pupils agreed that this was our very best Valentine's Day.

EDNA E. PREVOST.

LYNN, MASS.

My dear Mr. Bailey:

Since last September I have had a special class of mentally deficient children at the Cobbet School. I inclose you a "Parent's Day" invitation. You will be pleased to know that the invitations were printed by pupils in the building and the letters illuminated in "friendly colors" by my children.

The valentines also came from the Cobbet Press.

Mr. Emerson composed several and selected
one or two classics, which were decorated by
Ninth Grade pupils and sold to the children at cost.

Very truly,

LILLIE B. ALLEN.

INDIANAPOLIS, IND.

My dear Mr. Bailey:

We made our own programs for an entertainment recently.

The programs were written on ordinary type-writing paper with a machine, and folded to a $2 \times 5\frac{1}{2}$ inch size. From a theater program we cut a mask and made a wood block like the tracing. The lines on the block were cut with a small gauge. We printed the mask at the top of the folded program and used straight blocks to fill in the space below the mask. We got the best prints by using fountain pen ink and a hammer to make the impression.

Very truly yours,

WINIFRED BRAINERD.

Dear Mr. Baileu:

COLUMBUS, OHIO.

By this same mail, under separate cover, I am sending you photographs of pottery made the past year by some of my pupils at North High School. The photographs were taken by one of the boys of the school before the pottery was fired or glazed.

I began this work as an experiment several years ago because of my own delight in it and in addition to the regular Art course, the pupils doing the work during study hours or whenever they had an opportunity.

Our first attempts were made with some clay ordered by permission of the Board of Education from a University Ceramic Department.

The modeling went on fairly well, considering our equipment, an old sand table from one of the



A folded typewritten sheet ornamented with block printing, a hammer being used in place of a printing-press.

laboratories being covered with white oil cloth and used as a stand, and pieces of plaster serving as foundations for individual pieces.

When, however, it came to drying the modeled pieces our troubles began. No matter what we did, the clay would crack and ruin the shapes upon which so much time had been spent.

We complained about this and were told to dry slowly in a saturated atmosphere. A wooden box After this we let common sense and experience guide us and discarded the scientific clay in favor of plain Zanesville stoneware clay, which dries in the ordinary school room whether the atmosphere be "saturated" or not, and our work gradually improved.

As soon as the pupils found that they were simply elaborating the mud pies of their childhood days and that they were to make the clay obey



A photograph showing some of the work referred to in Miss Gale's letter. The photograph itself was made by a high school boy, Mr. Lowell Mulligan, of Columbus, Ohio.

was therefore coated on the inside with plaster of paris, and the modeled pieces dried in that, taking ten days or two weeks to the operation. Result, more cracked clay.

One persistent interested boy modeled a tile five times over, and when the fifth time his work was spoiled I determined, somewhat disgusted over our failures, to try something which would at least be different. Hastily making a small bowl, I took it home and placed it over a register exposed to the furnace heat. Returning two or three hours later to see how many cracks had developed, I was greatly surprised to find that the bowl had dried beautifully and was as white and smooth as could be. The furnace heat was not exactly a "saturated atmosphere," but it did the work.

them and carry out their own ideas with suggestions only from me, they lost their timidity and really made the clay a medium for self-expression.

At first in coloring we used underglaze colors on the modeled pieces, depending on one firing only. Later two firings were given, one for the biscuit ware and the second to develop the bright majolica glaze. Now, however, matt glazes are being used for us by Mr. Jervis of Oyster Bay and by the Roseville Pottery Company of Zanesville, who have successfully fired our work.

We hope in time to have a kiln of our own and to do our own firing and glazing.

Don't you think a merit of some kind should be given for art work above the average? We give one-fourth of a credit each year for four years, but no special recognition of work. For instance, the large vase or lamp form in the center of the group in the photograph was made by a senior who failed to graduate with his class because of indifferent work in his studies, but who is very strong in his art work. It seems to me that according to the trend of modern education an extra credit where deserved would do no harm.

Let me say that I have enjoyed the School Arts Magazine since 1906 and have received inspiration and help from every issue.

I am so glad to see more attention given to systematized art work in the high schools of the country, for that is surely needed.

With best wishes, yours very truly,

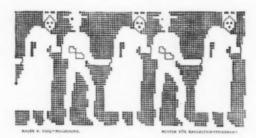
MARY C. GALE Teacher of Drawing, North High School.

LOVE'S CUP

Life's richest cup of Love's to fill— Who drinks, if deep the draft shall be, Knows all the rapture of the hill Blent with the heartbreak of the sea.

The tired wings that trail the ground! The sudden flight to worlds above! Oh thorns among the roses bound About the brows of those who love!

- Robert Cameron Rogers



A "square deal" on St. Valentine's Day, first reproduced in Kind und Kunst.



RECOMMENDED FOR BEGINNERS

BY THOSE WHO HAVE HAD EXPERIENCE IN TEACHING

WICE or thrice a year for the last ten years the Editor has had the pleasure of receiving "an unspoiled letter from an unspoiled child." Some person who has been through a college course in art, or who has studied in a school where "art for art's sake" is emphasized, finds herself (it is always a girl) suddenly plunged into teaching in the public schools. The complex but orderly system of business management, the variety of topics involving drawing and handicraft, the "new things not there when I was a girl," the hydra-headed enthusiasm of schoolrooms full of healthy boys and girls, the facile efficiency of experienced teachers, the endless vistas of opportunity, and the lack of personal equipment for meeting the diverse requirements, are a startling revelation. To whom should the novice turn if not to an Editor of a Magazine of Drawing and Handicraft? So the Editor gets the letter. It reflects open-eyed wonder, blushing ignorance, and verdant hope. It asks for "the ten best books" for a young teacher of the arts to buy, read, study, and absorb. It thanks in advance (the most insolent invention of some lazy man) and ends, "Yours in haste!"

The Editor made up his mind to employ counsel on this perennial case. He sent out some twenty-five letters, to supervisors and teachers of drawing having reasonably good reputations and powers of introspection, to secure a composite opinion. The results were of such interest to the Editor that he has decided to share them with the readers of the SCHOOL ARTS MAGAZINE.

First, consider a few individual letters:

From Harrisburg, Pa.

For downright straight-to-the-point helpfulness I would For downing it straight-to-the-point helpfunces I would tell any young (or older) teacher to read, mark, learn, and inwardly digest the Applied Arts, the Manual Arts, and the Prang Series of books. They are each and all full of good things and practical.

Sincerely, MARY H. HOGAN.

From St. Paul. Minn.

I almost wrote you that no books were indispensable for supervisors of drawing and handicraft. The indispensable things are sympathy and correlation with the nature, geography, and literature of the primary grades, a fine sense of fitness of material, and space relations, and some knowledge of mechanical drawing — all of this for primary grades.

The upper grades are of course pearer the art student's own

The SCHOOL ARTS MAGAZINE is full of practical suggestions for all grades. The Applied Arts books, the Manual Arts books are both suggestive, but a sympathetic living with the children is the thing.

Yours truly, LAURA A. WILLIAMS.

From Kalamazoo, Mich.

I am sending you a list of ten books which have proven very helpful to me in my work. I am led to think that the art teacher receives more inspiration from fine examples of work than by theories. I would like to see a list of good illustrative material suitable for class work.

I cut and mount my magazines, Studio, Keramic Studio, House Beautiful, and such books as Jessie Foord's "Studies for Class Use," and find them invaluable.
Sincerely yours,
EMELIA GOLDSWORTHY.

From Baltimore, Md.

From Baltimore, Md.

In reply to your note I am giving as my opinion that my help and inspiration in planning work and in getting new and helpful suggestions have come primarily from the School. Abrs Macaline. The Frang Text Books have helped very much in the work with grade teachers. Added to these, I should say I owe most to the use of Mr. Dow's books and Batchelder's "Principles of Design," Dr. Haney's articles on "Class-room Practice in Design," and Anson Cross's "Mechanical Deswing." lass-room Fracticanical Drawing."

These are what come to me just now.

Very truly yours.

OLIVIA F. KEACH. chanical Drawing

From Columbus, Ohio

From Columbus, Ohio.

My knowledge of book-lore on art is rather limited — I believe in "seeing" the things and constructing from them to suit conditions. However do not misunderstand me; we must have books and lucid ones too, but my stock is low and selected. If you will pardon a personal reference, let me say that I continually read biography and history in both art and music. Am now finishing the life of Bismarck with Henry Irving as the "Dramatic Art Showman."

Cordially yours,

W. D. CAMPBELL.

From Oswego, N. Y.

From Oswego, N. Y.

Conditions vary so much that books which seem "absolutely indispensable" at one time are of no value at another. There are several, however, which I use constantly—a fair test of their general usefulness.

I have been fortunate in always having a good public reference library at hand, and have had the use of such books as Fletcher's "History of Architecture," Sturgis' "Appreciation of Sculpture," Day's "Ornament and its Application," and Strange's "Alphabets." If they were not accessible through a library, I should try to own them.

The beginner would be wise to subscribe to the School Arts Magazine the first thing!

Very truly yours, JEAN KIMBER.

From Ottawa, Ill.

I inclose a list of books that have been very helpful to me.
I have put them in the order of their importance. But the
most invaluable of them all is your magazine.
I have been to a great many summer schools, and at every

one our instructors never failed to have the School Arts Magazine as their best reference book and to urge their students to subscribe for it at once.

I hope I may have answered your question satisfactorily, and believe me when I say there is no "blarney" about it.

Your sincerely.

FANNY J. KENDALL.

From Indianapolis, Ind.

It would be difficult for me to select ten books I would

It would be difficult for me to select ten books I would rather have than others.

Next to my Japanese books I think perhaps I use my two volumes of "Decorative Plant and Flower Studies," by J. Foord, more frequently than other books. There are no plant drawings, I think, finer. As these books are too expensive to have in all our schools, we have supplied them for the high schools, and we bought a number of volumes which we divided so that parts of them might be in all the schools. Among our nature books we prize highly "The Tree Book," by Rogers, and "Nature's Garden," by Blanchan. We have "Freehand Perspective and Sketching," by Norton, in all our schools. We still have an affection for "Composition," by Dow, and enjoy the Batchelder books on design.

Many things that we prize most could hardly be recommended for a general list of the ten best books; for instance, "The Tomb of Iouiya and Touiyou," by Davis, we use on every possible occasion. Most works on historic art, are very inadequate in illustration. The work by Davis is one of the few things published since modern color processes of reproduction have made it possible to secure the qualities of originals.

We have just ruschessed "British Museum Reproductions

duction have made it possible to secure the qualities of originals.

We have just purchased "British Museum Reproductions from Illuminated Manuscripts." Things of this kind we find very valuable.

I fear I cannot help in the making of a list. I find greatest help in books on special subjects such as the Illuminated Manuscripts, and still one would hardly add this to a small list of books for general use.

We are enjoying the SCHOOL ARTS MAGAZINE in its new

Sincerely yours, WILHELMINA SEEGMILLER.

All the lists submitted 1 were carefully tabulated, and the votes were counted with the following result. The titles are arranged in order of importance. The first received the largest number of votes, the second the next largest, and so on to the last, which received three.

Freehand Perspective and Sketching. Norton.
 Design in Theory and practice. Batchelder.
 Fine and Industrial Arts in Elementary Schools. Sar-

4. Art Education for High Schools. Prang. 5. Composition. Dow. 6. Art Crafts for Beginners. Sanford. 7. Pictorial Composition. Poor. 8. Landscape Panting. Harrison.

8. Landscape Painting. Harrison.
9. Nature Drawing. Bailey.
0. How to Study Pictures. Caffin.

As might have been expected, the list of titles receiving but one or two votes only was a long one. Here it is, with the titles arranged alphabetically for ease of reference:

Among Flowers and trees with the Poet. Wait and Leon-Applied Mechanical Drawing. Mathewson and Stewart.

Applied Mechanical Drawing. Sturgis. Appreciation of Sculpture. Stu-Art for Art's Sake. Van Dyke.

¹ There were seventeen lists returned in time for tabulating. They came from the following:

W. D. Campbell May Gearhart F. M. Goldsworthy Emma Gratten Mary B. Grubb

Mary H. Hogan Fanny J. Kendall Olivia F. Keach

Art in Au,
Art Education in
Haney,
Bases of Design. Crane,
Basket Maker, Turner.
Booklet Making, Bailey,
Brain and Personality. Thompson.
Clay Modeling. Sargent.
College Histories of Art. Van Dyke.
Color Notation. Munsell
Color Problems. Vanderpoel.
Construction Work. Worst.
Copper Work. Rose.
Classic Point of View. Cox.
Decorative Plant and Flower Studies. Foord.
Encyclopedia of Painting. Bryant.
Essays. Emerson.

Lassian Verities. Münsterberg.

Althews.

Art in Advertising. Parsons. Art Education in the United States. Edited by Dr.

Gate Beautiful. Stimson.
Handicraft for Handy Boys. Hall.
Handbook of Ornament. Meyer.
History of Art. Goodyear.
History of Art. Simonds.
History of Education. Monroe.
How to Enjoy Pictures. Emery.
How to Know the Wild Flowers. Dana.
How to Make Baskets. White.
Industrial Work for Public Schools. Houlton and Rollins.

Landscape Painting. East. Masters in Art.

Masters in Art.
Masterpieces in Color. Edited by T. L. Hare.
Mechanical Drawing. Anthony.
Mechanical Drawing. Cross.
Method of the Recitation. McMurray.
Nature and Ornament. Day.
Occupation for Little Fingers. Sage and Cooley.

Origin of Inventions

Occupation for Little Fingers. Sage and Cooley. Origin of Inventions. Paper and Cardboard Construction. Buxton and Curran. Perspective Sketching for Working Drawing. Mathewson. Psychology and the Teacher. Münsterberg. Principles of Design. Batchelder. Primary Bandwork. Seegmiller. Primary Handwork. Seegmiller. Primary Manual Work. Ledyard and Breckenfel Psychology. Stout, Angell, or Judd. School and Society. Dewey. Story of Art throughout the Ages. Reinach. Talks to Teachers. James. Text Book of Design. Kelly and Mowll. Theory of Pure Design. Ross. Use of the Plant in Decorative Design. Lawrence. With Brush and Pen. Hall. World's Painters. Hoyt. Young People's Story of Art. Whitcomb.

As a side light on this question of a private reference library, the Editor asked the School Arts Publishing Company, through whose office pass orders for large numbers of art educational books every month, to furnish a list of the ten books having the largest sale during the past twelve months. That list follows. The titles are arranged in the order of sales, the largest

Booklet Making. Bailey. Blackboard Sketching. Whitney. Nature Drawing. Bailey. Mechanical Drawing. Cross. Art Education for High Schools. Prang. per Work. Rose Copper Work. Rose. Writing, Illuminating, and Lettering. Johnston.

Elizabeth McNeil Walter Sargent Wilhelmina Seegmiller Mabel B. Soper Amelia B. Sprague Laura A. Williams Annie M. Wilson

Freehand Perspective and Sketching. Norton. Principles of Advertising Arrangement. Parsons. History of Art. Goodyear.

The chief surprise from the returns of the supervisors and teachers of art and handicraft, a surprise delightful of course to both Editor and Publisher, was the important place given to the School Arts Magazine. The request was for books alone; but nearly every list of books was accompanied with a paragraph mentioning the

magazine as an indispensable source of inspiration and help. For this Editor and Publisher are thankful. Such words from such a source justify the conclusion that an ideal some twelve years old is at last beginning to be realized—realized, it must be admitted, largely through the copperation of these same earnest people, and many others, who in the midst of their busy lives always find time to be helpful, thus proving themselves to be friends indeed.

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Learning to Do
Doing to Earn
Earning to Live
Living to Serve

Arthur D. Dean



MOTTO:

"I will try to make this piece of work my best"

DEAR BOYS AND GIRLS:

THIS letter is for you, especially if you are members of the School Arts Guild.

All boys and girls like to have a part in anything big, anything worth while, especially if there is something in it for them. Here is a chance for you.

The American Crayon Company proposes to discover by experiment the best kinds of crayons for use in school. Read their announcement on the back cover of this magazine. They have asked The School Arts Magazine to coöperate with them in this great undertaking. We are glad to do so, and to invite you to help, too.

The monthly contests will continue but for the present, therefore, under the direction of The American Crayon Company. The awards will be announced here as usual and the jury will here make its comments on the results every month.

May you all adopt the Motto of the Guild, and work with a will to help in discovering the best kind of crayon for each kind of school drawing, and to win some of the liberal prizes offered by The American Crayon Company.

THE SCHOOL ARTS MAGAZINE.

AWARDS FOR DECEMBER

Calendar Contest

First Prize: German Silver Drawing Instruments and Badge with Silver Decoration.

Hazel Dutrow, VII, School 53, Baltimore, Md.

Second Prize: Box of Water Colors and Badge with Silver Decoration.

Minnie Cherudio, IV, Pleasant Street School, Westerly,

Thelma Dolan, VI, 138 Winthrop St., New London, Conn.

Fred Dotolo, IV, Pleasant Street School, Westerly, R. I. Lester Reine, VIII, School 52, Baltimore, Md. Mary White, VIII, Wallace, Idaho.

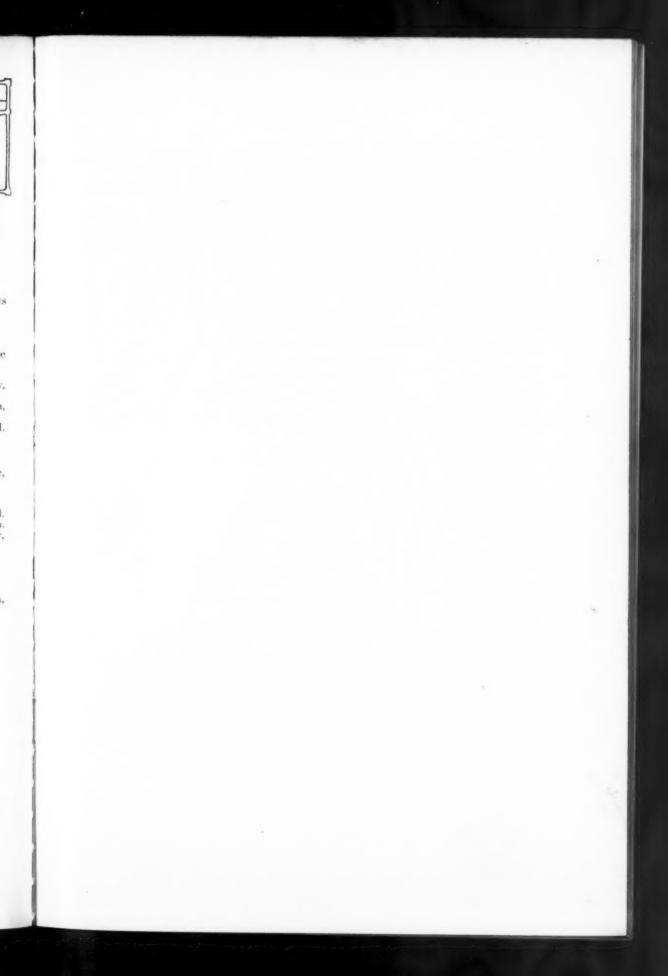
Third Prize: Miniature Masterpiece in Frame, and the Badge.

Ursula Burns, IX, Pontiac, R. I.
L. Marguerite Culver, VII, School 52, Baltimore, Md.
Percy Dingle, VI, 1796 Cemetery St., Calumet, Mich.
Michael Ferendo, IV, Pleasant Street School, Westerly,
R. I.

Anna Johnson, IX, Pontiac, R. I.
Charles Landis, VIII, School 52, Baltimore, Md.
Alice Maginnis, VIII, School 52, Baltimore, Md.
Earl Macauley, VI, Oreland, Pa.
Ernest Richardson, V, Baker School, Walla Walla,
Wash.
Jennie Swanson, IX, Pontiac, R. I.

Fourth Prize: Badge of the Guild.

Mamie Benchick, VI, Laurium, Mich. May Clem, IX, Oreland, Pa. Elizabeth Davis, VII, Wellsville, N. Y. Bonnie Jean Demaris, VIII, Walla Walla, Wash. Taylor Douthit, VI—A, Oakland, Cal. Verlie Field, VI, Wallace, Idaho. Ella Francis, VI, New London, Conn. Helen Galer, VI—A, Oakland, Cal. Lorena Garcia, VI—A, Oakland, Cal. Florence Gardner, IX, Lancaster, Mass. Edward Green, VIII, Baltimore, Md. Violet Greenway, II, Westerly, R. I. Chester T. Hubbell, VIII, Albany, N. Y. Gladys Johnson, VIII, Walla Walla, Wash. John Lawson, VI—A, Oakland, Cal. Rose Levitt, VI, New London, Conn. Ernest Sandberg, IX, Pontiac, R. I. Russell Shaeffer, V, Baltimore, Md. Myrtle Tinker, VII, Lancaster, Mass. Mildred Wells, VII, Wellsville, N. Y. Robert R. Willett, VIII, Albany, N. Y. Virginia Wright, VII, Baltimore, Md.





This is one of three Great Historic Paintings most appropriate for School Decoration. An announcement of an interesting Special Offer of these pictures is made in our advertising pages. COPR. BY THE KNAPP CO., INC., N. Y. SIGNING THE DECLARATION OF INDEPENDENCE FROM ORIGINAL PAINTING BY SARAH DODSON

SCHOOLROOM DECORATION DEPARTMENT.

Beautiful enlarged prints in Intaglio Gravure of this subject, suitable for Schoolroom Decoration, may be purchased from the School Arts Publishing Company. Write for approved list. See advertisement elsewhere.